

JOURNAL
OF THE
United States Cavalry Association.

VOL. XIV.

JULY, 1903.

No. 49.

THE AMERICAN CAVALRY IN CHINA. *9/1/11*

BY CAPTAIN WILLIAM W. FORSYTH, SIXTH CAVALRY.

WHEN the orders were promulgated for the advance of the Allied China Relief Expedition from Tientsin the horses of our cavalry had not arrived there, and for that reason the cavalry were left in that city to aid in guarding it and the lines of communication. The cavalry were anxious to go dismounted rather than not go at all, but in that case there would have been nobody to receive and care for the horses, which were expected daily.

On the afternoon of August 4, 1900, the troops that were to go began to move out preparatory to the attack on Peitsang early the next morning, and the disconsolate troopers, the few that were not on duty, stood around and watched them depart. Reilly's battery was the last to leave camp, and just before taking the road the Captain drilled it for some minutes in aiming and firing. From the staff on top of one of the highest buildings in Tientsin a large Japanese flag was flying, and I can easily imagine now that I hear the voice of the lamented Reilly calling out, "At that flag staff, at 2,000 yards." The next we were to hear of Reilly was a brief dispatch from General Chaffee, dated in Peking, "Captain Reilly was killed on the wall yesterday." As the last caisson disappeared down the Victoria Road, the cloud of disappointment that settled down over the cavalry camp was so

dense that, as a trooper remarked, "you could shoot holes in it." But the cloud soon lifted.

The furious cannonade and small-arm fire that broke out about 3 o'clock next morning at Pei-tsang, seven miles off, had hardly died away when a rumor spread through the troops in Tientsin that there was a large force of Chinese about ten miles southwest of the city, and that they were going to attack it as soon as the troops that had started for Peking were far enough away to make assistance from them impracticable. This was interesting—decidedly comforting, if true; so listlessness and apathy at once disappeared and things assumed new life.

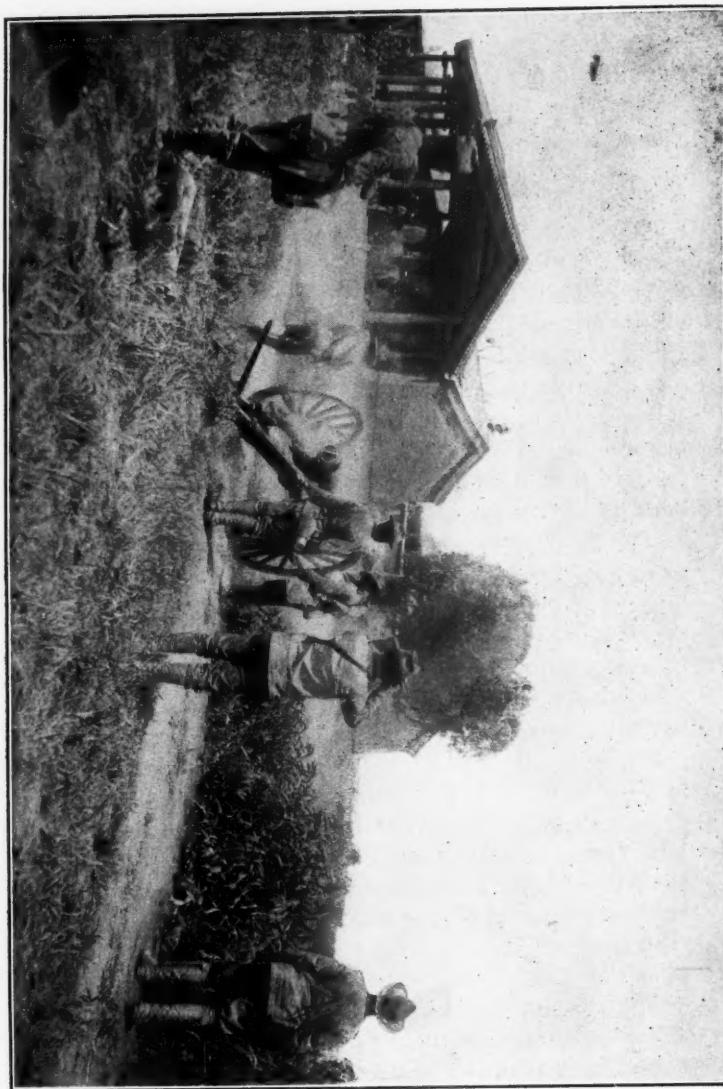
The rumors were repeated from day to day, and becoming more and more definite, and the reported strength of the Chinese growing until it reached 20,000. Much anxiety and apprehension was naturally aroused, for the total allied force left at Tientsin was only about 1,500.

As time passed and the threatened attack did not come, the situation became intolerable, for the men not on guard slept in their clothes and on their arms, and the outpost and other guard duty was very arduous. It was, therefore, decided to await attack no longer, and a reconnoitering party was sent out, which developed the enemy about seven miles southwest of the city, and reported them to be in position with cavalry, artillery and infantry.

The commander at this time of the allied forces in Tientsin was General Dorward, of the British Army, and as soon as practicable after this reconnaissance, he ordered an attack, the troops to make it being made up of the Sixth United States Cavalry, twenty-five of the First Bengal Lancers, and twelve Japanese cavalry, and a detachment of British Indian infantry. The American troops, commanded by Lieutenant Colonel Theodore J. Wint, consisted of two squadrons Sixth Cavalry, Troops A, C, D, I, K and L; total enlisted strength, 390. But the detachment of twenty-five Bengal Lancers were united with our cavalry, and marched and fought with it to the end of the action.

The small detachment of Japanese cavalry was attached to Colonel Wint's headquarters at first, and later did good

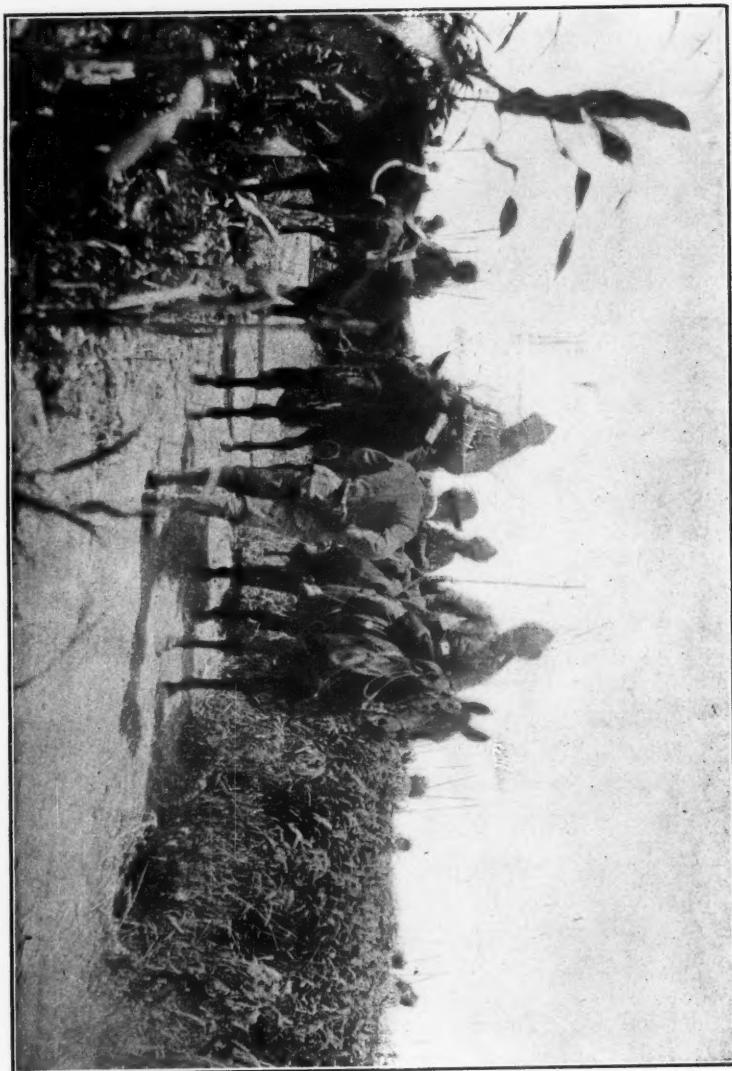
UNITED STATES ARTILLERY AT PEI-TSANG.



service as a combat patrol. Of the remaining two troops of the Sixth Cavalry squadrons, Troop B was on guard at the arsenal in the walled city of Tientsin, and Troop M was with the allied army then in Peking.

About 5 o'clock on the morning of August 19, 1900, the several contingents of troops were united about two miles southwest of Tientsin, and the advance began with the First Squadron Sixth Cavalry, under Captain A. P. Blocksom, leading, with Troop D and the lancers forming the advance guard, the British infantry, under General Dorward, followed, and the Third Squadron Sixth Cavalry, commanded by the writer, brought up the rear. After moving forward about two miles the advance guard drew the fire of the Chinese outposts, and was immediately dismounted and deployed as skirmishers, the remainder of the First Squadron dismounting and joining them. The line thus formed pushed steadily forward through a field of growing corn, driving the Chinese back on their main body.

On issuing from this cornfield the ground stretched straight away towards the enemy, open and gently undulating, for about 2,000 yards, and to the right and left for several miles, and was firm and smooth. The enemy's line became visible almost from flank to flank, its right resting on a village and its left on rugged and difficult ground, and the whole overlapping our line on each flank by more than half a mile. There they were, thousands of them, lined up in an open order formation, with innumerable bright colored flags and banners waving in the early morning sunlight. Not more, perhaps, than one-fifth of them were provided with firearms, which they were using with commendable energy and execrable marksmanship, while the others, armed with lances, spears and swords, were going through evolutions that looked something like the stately measures of the minuet, except that, now and then, they would jump up and down and brandish their weapons, and, I suppose, "make faces" at us at the same time. Here and there one of these terrifying figures would suddenly collapse in a little heap on the ground and take no further part in the mystic panto-



BENGAL LANCERS (BRITISH) AT PEI-TSANG.

mine; pierced by a Krag-Jorgensen bullet, "subsequent proceedings interested him no more."

Our line continued the advance several hundred yards out in the plains and was then halted, the men lying down; and the Third Squadron was dismounted and deployed on the line, prolonging it to the right. The horses of the First Squadron and the Lancers were on the firing line, held by the lariats, and the horses of the Third Squadron were about 300 yards in the rear. The plan was to hold our line in this position until the British infantry moved around and enveloped the Chinese right, then we were to advance.

While the British were making this movement, the two hostile lines remained about 1,200 yards apart, firing at each other, the Chinese doing but little damage. Half a dozen times they attempted to charge, but never came nearer than 700 or 800 yards. Shortly after this duel began, a battery of what looked like nine rapid fire guns with shields took position opposite our left flank and perhaps 1,500 yards away. Of course a heavy fire was at once turned on this battery, notwithstanding its great distance, and its fire soon became spasmodic and finally ceased, but it got in one salvo, and I gazed anxiously at Blocksom's horses, expecting to see havoc and confusion among them from bursting shrapnel. Nothing happened, however, nothing but noise and smoke. They were using black powder with these guns. This battery turned out to be gingales thrust through the backs of jinrickashas, and was not dangerous beyond 800 yards.

There was one Chinese officer on a pinto horse, who was a conspicuous figure, riding about encouraging his men, and a number of our good marksmen were told off to bring him down, but I do not think he found his death on that field, as I saw him from time to time up to the end of the engagement. Later on, I heard an old trooper with an alliterative soul and a long record of target practice victories, lamenting his failure to "plug the pigtail on the pinto pony." It still takes a deal of lead to kill a man.

At length, after perhaps an hour and a half of this kind of fighting, the British attack on the Chinese right became apparent, and the enemy soon withdrew from the village, thus

exposing their right flank. The auspicious moment for a mounted charge had arrived. The exposed flank, the quality of the enemy, his formation, the character of the ground, its condition, everything was favorable.

The First Squadron was quickly mounted and charged as foragers in echelon of troops, using first the revolver, then the saber. The Bengal Lancers charged with the leading troop, and the charge was led by Lieutenant F. C. Marshall, whose horse was killed under him. The horses of the Third Squadron were ordered up to the firing line, but the men were kept on the line and continued to fire as long as they could do so without danger to the charging troopers.

While waiting for our horses, I watched the charge through my glasses. It was an exciting spectacle, thrilling beyond words. It struck the exposed flank, rolled it up, and literally swept the Chinese away. But there was nothing new in it for the professional cavalryman, except experience for those that participated. It was the normal charge of the drill book, well executed.

I saw more than one Chinaman struck down with the saber, but on going over the field after the action, I saw no bodies with saber wounds. Those struck down were probably only stunned, and afterwards escaped or were made prisoners, or I may, of course, have failed to see the few that fell under the saber. I also noticed one trooper sorely beset by five Chinamen, two of whom were trying to pull him from his horse on the off side, another one was in front of the horse, and two others were running up to take part. The arrival of our horses prevented me from seeing the issue of this struggle, but it was learned later that the trooper was the squadron sergeant-major, and that he killed three of his antagonists, and the other two were cared for by another trooper who came to the rescue.

The Third Squadron was then mounted and, after detaching one troop to occupy and hold a village on our right rear, moved forward in support of the other squadron; but the action was over. Six villages, including the one on which their right had rested, were destroyed, and their force was thoroughly dispersed. A conservative estimate of their

number is 5,000, and their loss about 400 killed and sixty prisoners; the number of wounded, unknown. They were armed with Mausers, Mounlichers, gingals, spears, lances, and swords.

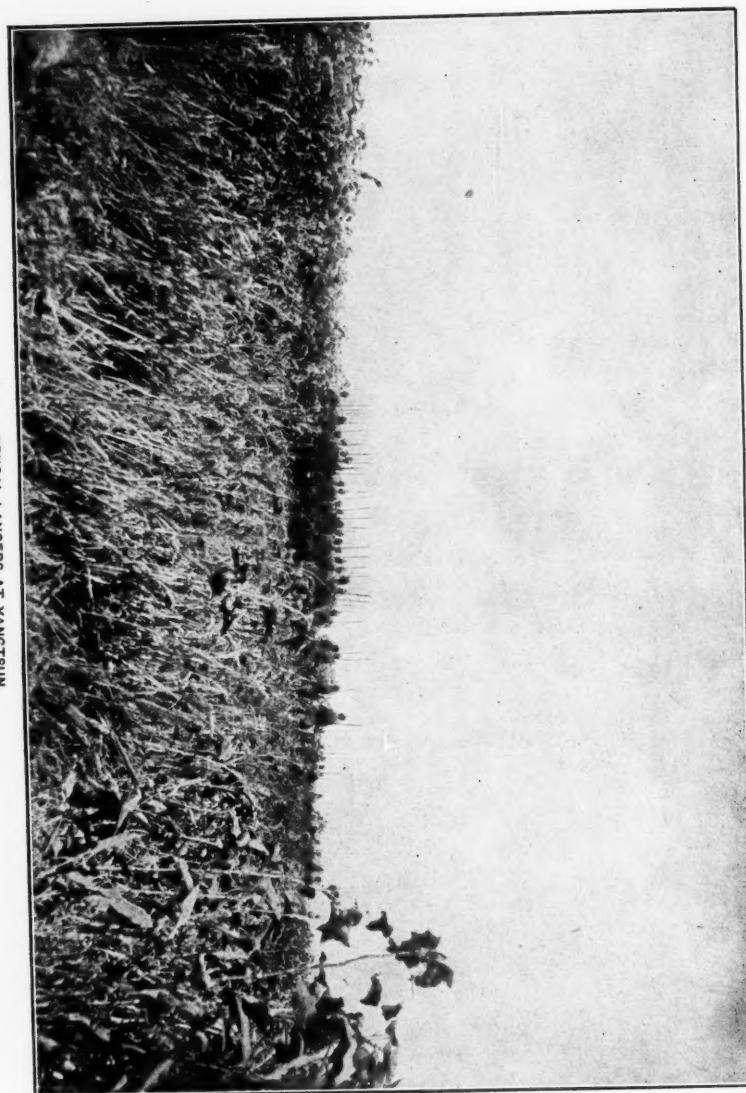
Our loss was six men wounded, one of whom died the next day, and fourteen horses killed and wounded. Includ-
Charge ing the Lancers, there were 225 men in the mounted charge, which, from start to finish, covered about 2,000 yards. The fight began about 6 and was over by 10 o'clock, in the morning.

WB. The only unfavorable foreign criticism that I have seen of the American cavalry in China, namely, that it "was lacking in dash—was too calculating," was undoubtedly based on the way our cavalry was handled in this action, and, being interpreted, means that as soon as our line emerged from the cornfield and beheld the favorable ground and the enemy's formation, and "tasted his quality," a mounted charge by the whole cavalry force should have been delivered. Well, maybe so. There are usually more ways than one of doing a thing. It is difficult to see what more could have been accomplished. The action as fought was decisive. The enemy were widely dispersed; they lost four or five hundred in killed and wounded and six villages destroyed; and they threatened Tientsin no more.

By the other method more of the heathen might have been sent to their flowery kingdom come, but it would have been needless killing.

Early the next morning, August 20th, the Third Squadron marched for Peking, arriving there August 23d. The First Squadron remained in Tientsin doing guard and various other duties, and later was moved up to Yang-stun, where it remained guarding the line of communication until November, when it was sent to the Philippines.

For a month after reaching Peking the Third Squadron was constantly employed in scouting the surrounding country, dispersing Boxers and scattered detachments of Chinese troops, escorting the supply trains back and forth between Peking and Tungchou and patrolling the American districts in Peking. There was no hay to be had for the horses, and



BENGAL LANCERS AT YANGTSUN.

long forage was obtained by foraging the country. For this purpose a train of fifty Chinese carts was organized, and it made two trips a day with a detail of men and brought in green fodder, which answered fairly well until hay could be supplied.

The men were quartered in conical wall tents, which, as cold weather come on, were floored with brick and the floors covered with Chinese matting, the walls pinned down close and banked with earth. Coal was the only fuel to be had, and as the Sibley stove is not a coal burner, heating the tents became an important problem, and was happily solved by Captain De Rosey C. Cabell, who devised a brick grate about twenty-four inches high and thirty inches square in cross section, the Sibley stove being placed on top. The grate had a small opening in front above the grate bars and a larger one below for removing ashes, and both could be closed, if necessary, by means of bricks. The grate held about a bushel of coal, which was put in through the door of the Sibley stove, and by loading the grate with coal about 10 o'clock P. M., and cutting off the draft, fire was kept all night. During December and January that winter the temperature was rarely higher than 15° F., and frequently lower than that, sometimes below zero, but the tents were always comfortably warm. My own tent was heated in this way, as were those of the other officers.

The health of the men was excellent, much better than that of the troops quartered in Chinese houses, which are usually small and have little or no ventilation.

With the exception of venereal diseases, there was but one case of sickness in my troop that winter, and it was a case of rheumatism which the man had before he left America.

Stables were improvised by building a framework of posts supporting a bamboo roof and covering it, roof, sides and ends, with paulins. High winds prevailed during the winter and spring, and the paulins on the windward side were always kept down; those on the other side wholly or partially looped up, depending on the weather. The horse covers, blanket-lined canvas, were put on the horses at sun-down and removed at morning stables, and the horses were

JAPANESE TROOPS MOVING OUT OF PEI-TSANG.



quite as comfortable and healthy as in their stables in America.

In December, a day or two before Christmas, if I remember correctly, an expedition under Colonel Wint, and consisting of cavalry, artillery and infantry, with wagon train, was sent out southeast of Peking, and an interesting incident of it was the crossing of the Pei-Ho on the ice.

Before describing this crossing, however, it should be observed that one of the amusing sentences in our drill regulations is this: "Ice from four and one-half to six and one-half inches thick will bear cavalry marching in column of troopers or twos," and one of the possible meanings of this is that ice less than four and one-half inches thick will not bear cavalry marching in column of troopers—or twos. The ice over the Pie-Ho was scant four inches thick, but it was good ice.

The guns and wagons were hauled up to the river bank and the animals then taken out and led over, together with the cavalry horses, at a place where earth and litter from the picket lines had been spread on the ice to prevent slipping. The wagons were heavily loaded with rations and forage, for we were only one day out from Peking, but by means of a long rope fastened to each in turn they and the guns were safely drawn over by hand, no one being allowed near them while they were on the ice.

Visits of inspection were made from time to time by our officers to the troops of the different foreign nations then represented in Peking, the greatest benefit derived being, I suspect, increased satisfaction and confidence in our own arms and equipments, our own methods, and our own service. As a result of these visits, and also of general experience during the campaign, many long standing impressions of mine were strongly confirmed; and at the risk of being tedious, I venture to state some of them here.

Foreign Troops vs. American

The McClellan saddle is the best military saddle in the world; it is the strongest, most durable; most simply, securely and quickly packed; one of the lightest; is the coolest, best ventilated; and it seats the trooper closer to his horse than any other. But in my opinion, our saddle pack



RUSSIAN INFANTRY, NEAR HO-SI-WU.

can be improved. Some means should be devised to fasten the canteen down so that it will have no pendulous motion. It can be easily done; a small fixture at the bottom of the canteen to fasten it to the saddle-bag would prevent that thumping and flapping that is now so annoying. Of course the trooper would probably have to dismount to drink from his canteen, but he should do that anyhow.

*Equip
ment*

All cavalrymen appreciate the importance of reducing, so far as may be consistent with utility, the weight of the pack. Every ounce not essential should be pared away. Then, why experiment with a picket pin? It is obsolete and has been for years. The conditions that made it useful in our service have permanently passed away. It should be discarded, and a few feet of the lariat might well go with it. Our saddle-bags are not all that could be desired, but I did not see among the foreigners anything that I liked better. In the absence of something better, though, they may be improved, and at the same time a little weight shaved off, by making them two inches narrower. They would still carry all that they now do and would not rub the horse's hair off.

The carbine should be carried on the trooper's back. I am familiar with the fact that this has been tried, or partially tried, in a past generation, and, for a "sufficiency of reasons," abandoned. My opinion on this subject has been so strengthened by my own experience, as well as by recent cavalry history, that it is now conviction. If cavalry is to be valuable, it must arrive, and must shoot quickly as well as accurately. To be able to arrive, the horse must be cherished, and to be able to shoot quickly, the carbine must always be at hand. Neither the one nor the other can be most satisfactorily accomplished as long as we carry the carbine in the present manner. Carried on the saddle, the carbine causes as many sore backs among our horses as bad riding, and with both combined the horse is "up against it" hard. The carbine, from its weight and shape relatively to the other articles that go on the saddle, cannot be counterbalanced; it is impossible to so distribute the weight of the pack as to equalize the pressure of the saddle. The British cavalry were the only mounted troops in China, besides our



GATE WHERE CAPTAIN REILLY WAS KILLED.

own, that carried the carbine on the saddle, and it may be added that they had more sore back horses than any other.

Others, it seems, find the "sufficiency of reason" on the opposite side. Nor does it seem to me a sound argument to say that it is better to have the sore on the horse's back than on that of the trooper. There will be no sore on the back of either, but the sore on the trooper's back would be the lesser evil; it could be more easily treated and more quickly cured. It is not so difficult as it seems. The strap should be on the left side of the carbine, one end of it attached to the butt by a fixture that could be worked by finger pressure, so that the strap end would be set free and the carbine brought down or returned to the back without passing the head in between the strap and carbine. The butt would be behind the right shoulder, the left side of the piece next the body.

One more point: the importance of estimating distance drill, especially at the longer ranges. This was deeply impressed on me during the action described above, where a clear but undulating plain spread away in front of the firing line for a mile, the undulations making the correct estimation of distance very difficult. Its importance entitles it to a prominence in our course of instruction in rifle shooting greater than, I think, it has yet received.

JANUARY, 1903.*

9/1/11

* The above article was written before the publication of General Orders No. 20, A. G. O., 1903, which prescribe new regulations for small-arms practice, and give greater prominence to estimation of distances.—[EDITOR.]

NOTES ON THE GERMAN MANEUVERS.

BY LIEUTENANT FRANK R. MCCOY, TENTH U. S. CAVALRY.

9/1/11

DURING a recent official visit to Germany to witness the Kaiser maneuvers, followed by a semi-official visit to the English army, I tried to remember that there were generals in the party to observe the handling and supplies of the foreign armies and the larger operations, so that I could keep my eyes open for the small things which would interest the troop commander and the average youngster on duty with the troops.

The new uniform order had just been published as we were leaving, and we were so busy in getting outfitted that the uniform was very apt to be uppermost in the first glimpses of the foreign armies. I find that our new full dress and dress compares very favorably with the line uniforms abroad and follows that of the English very closely, while our field uniform and theirs differ only in the buttons and headgear.

The Germans and French have no field uniforms, and it was most interesting to see the Kaiser and his army in the field, simulating war conditions, but wearing the same gorgeous and distinctive uniforms seen on parade. It made such an inspiring spectacle that I hope they will not change, not until a few more of us have seen this sight with its old time fuss and feathers.

It all seemed part of the business over there; but imagine a hard riding cavalryman jogging along a Western trail in white doeskin mounted in silver, topped off with a great steel helmet surmounted by a golden spread eagle; or a doughboy hiking it in the Philippines clad in a frock coat and hiding his head under a heavy metal helmet, not to mention

the seventy-pound pack under which the German soldier stumped off twenty to twenty five miles each day of the maneuvers, very often singing by companies to show his good spirits—by order. This sort of thing is apt to make a soldier man hypercritical at first, but after keeping one's eyes open for a few days, it comes over one that Germany has been a long time in the business, and has learned a great deal worth noting.

The new evening dress seems especially useful to officers serving abroad. In both the German and English armies the box spur is always worn with long trousers which fit the leg closely and are strapped down so that they fit closely to the boot. Most of the English and German officers wear boot-cut shoes with very stiff rubber in the congress tops, while some of the Guard officers wear the old Wellington boot, which gives a better look to the closely fitting trousers around the lower leg; indeed, one of the Guard officers I noticed abroad, had such closely fitting clothes all over, and his trousers were so tightly strapped that when he dropped his riding stick he was unable to pick it up. All foreign military tailors seem able to make a better standing collar than ours, and they told me that the secret lay in getting exactly the right place to join the collar on to the coat, so that the collar would start from the junction of the neck and shoulders and follow the slant of the neck. It is all around better for comfort and looks. They use a particularly stiff linen, or in some cases leather, to build up the collar. We found that our new style collars went all to pieces after the first rain, and the facing cloth bulged out between the gold braid so that a heavy grosgrained silk was substituted and seems much better, especially when woven in with the gold, as in the best full dress caps.

One is impressed in Berlin by the uniform smartness of all German officers. It is all the more strange when one knows of the very small salaries they receive, and the fact that most of the line officers have nothing much in addition to their pay. A major of twenty-two years' service in the Guard artillery, who was with our party, drew less pay than I. The Emperor himself is an adept at wearing all kinds of

military and naval uniforms in a very smart way, and being so particular himself, he demands the same of his generals, who, in turn, hold the younger officers strictly to account for their appearance. In public they are always seen wearing white gloves and saber. The sword is hung with such a short sling that it barely touches the ground, and is never hooked up. The German officers claim that this short sling is an advantage on horseback, and pointed to the way my own saber was flung all over, under and on both sides of the horse at the gallop, whereas, theirs hung close against the left hip. I tried their way but did not like it so well as our own; however, it is a matter of individual preference. Officers salute each other on sight, and not in order of rank.

Most of the German officers used the small prismatic field glasses, suspended by a leather lanyard, and buttoned on to a coat button to keep the glasses from flying up in the face. Bellowed rubber eye-pieces were generally used to prevent the jolt one is sure to get from glasses held to the eyes while the horse is in motion.

It is a fine sight to see the great number of officers in Berlin riding for pleasure, usually between 8 and 10 in the morning. All of the large avenues have bridle paths alongside the hard macadam or paving leading to the Thier Garten, which is cut up by numerous bridle paths and has a fine schooling ground.

There is no regulation saddle for officers, and most of them seem to prefer the flat English saddle with short stirrups. These were the saddles turned out to most of us at the maneuvers. This keenness for pleasure riding on the part of the officers of a nation who are not natural horsemen, impressed me, and I am told that all cavalry and mounted officers each year take a course in the riding school. They have a very good custom in their riding schools, of placing large mirrors at frequent intervals, so that one may judge of his own seat. An officer of one of the Guard Hussar Regiments told me, with some pride, that his Colonel, realizing that he had a poor seat, put himself under a junior officer for a course of instruction, and kept at it conscientiously until his seat had become a good one.

While in Paris, our military attaché there told, in glowing terms, that the French officers had the same keenness for riding, and that every officer on duty in Paris rode out every morning in the Bois de Bologne. I repeated this with some enthusiasm to my chief, who dragged me out next morning at daylight to draw a line on the French officers and their mounts. We rode through the Bois de Bologne for two cold, grey hours, and finally came upon one poor, dyspeptic looking chap, apparently riding for the good of his liver. On thinking it over, it was very early Sunday morning, when every dashing soldierman ought to be sleeping long and hard. We are still ready to admire the French spirit, with our attaché.

The attention to details in the German army was very soon evidenced, for upon our arrival an orderly from the War Office brought each of us a package of papers comprising a very full program of all our movements as guests of the Kaiser, the arrangements for the coming maneuvers, and a very good series of maps of the theater of operations. These maps were supplemented each day of the maneuvers by new ones, showing the exact positions of the contending armies the night before. Details were never too small to escape the thoroughgoing methods of the General Staff, and there was always one of these officers present to explain movements and to answer questions.

A most versatile officer of the Guard Artillery was attached to the party during its stay in Berlin, and contributed much to make the experience interesting and instructive. During the week of the maneuvers, whenever we climbed off the train, there was always an orderly placarded with each officer's number, who took us to a mount or to a carriage placarded with the same number. There was always the feeling that we were on a "personally conducted tour."

Graf. Waldersee and the other German officers who served with General Chaffee's expedition in China took special interest in the Americans, and it was most interesting and enjoyable having as fellow guests such men as Lord Roberts, Mr. Broderick, Generals Kelly-Kenny, French, Ian Hamilton, and their staffs, the very men who had the most to do with

carrying on the Boer War. The British and Americans were always drifting together and getting the benefit of each other's criticisms and experiences. One can well understand the British feeling for Lord Roberts after association with him. Although he is a man of seventy-three, he has the spirit and look of a man in his prime, and he sits his horse like a youngster.

The horse of the German cavalry is a never ceasing source of interest. The price they pay for their mounts explains, of course, the uniform excellence of the breeding, for the horses of the Hussars and of the Guard average between three and four hundred dollars apiece, while the line regiment mounts average over two hundred dollars each. The government breeding farms do not furnish remounts, but they have greatly improved the blood and standards. A commission composed of two cavalry officers, with an advisory veterinarian, travels over the country buying three-year-olds in the open market; and every horse goes through one-and-one-half years in the remount depot, and a careful course of schooling. For the first year in the service he is handled entirely on the snaffle, and all the horses in the German army, including officers' mounts, are handled on the snaffle from after the maneuvers until the first of the year.

The combination halter-bridle is very much the same as that used in the French and English armies and our own experimental one. The three armies have different ways of handling the halter stay. In the German army it is tied to the bridle; in the English it is a cord, and is thrown over the horse's neck from the near side and made fast on the standing part; while in the French army the stay is entirely detached from the bridle and fastened from one pommel ring around under the horse's neck and up to the off pommel ring, thus assisting in holding the saddle in place, at the same time forming a very neat method of disposing of that which so often gives an ununiform and slouchy appearance to a troop.

The German saddle for enlisted men consists of a tree keyed together, and which can be very easily taken apart and new parts inserted. Colonel Kerr, our military attaché,

thinks it the best saddle in existence, and we found it to have many good points. In the cavalry charges we saw no saddle slip, and the blankets stayed in place. The under surface of the saddle is roughened and the blanket is of a much heavier texture than ours, and this may have something to do with the way the saddle stays where it is cinched. On the whole, the saddle seems to be much clumsier than the McClellan tree, and for looks and security seems to set too high on the horse's back. The stirrups are hung rather far forward, necessitating posting, and this is done by both officers and men, excepting for the hundred yards or two when passing at parade or in review when they sit down in their saddles. For this distance the infantry takes the goose step, and an officer stationed at the marking place starts each line off in step and with the exact distance from the one preceding, no matter what the distances were before. Otherwise, their reviews were about the same as ours.

All the German cavalry regiments carry the lance, carbine and saber, while non-commissioned officers only carry the pistol. They still keep up the old distinctive and decorative uniforms, cuirassiers, hussars, uhlans and dragoons. The combination makes a magnificent spectacle in the field, and for pure cavalry work they have a body of horsemen that fill one with old time enthusiasm. I did not see them attempt any *dismounted* work during the maneuvers.

As one would suspect, the cavalry is the favorite arm of the Kaiser, who is a soldier born and bred, looks and plays his part, and it was a sight of a lifetime to see him leading his cavalry corps. The first general charge was made in successive lines of brigades, after the horse batteries with the cavalry had shaken the right wing of the enemy. The first rush of about one and one-half miles was over a grassy, rolling country; then came some floundering in cultivated fields and several spills into the ditch of a formidable railway embankment. Their double rank formation made the few messes worse. But the squadron leading was fine, and the successive lines of hussars, cuirassiers, dragoons and uhlans swept over these rough stretches and swooped down on the infantry, which had rallied by small units.

The fine leading showed again as the squadron scattered through, coming together again like flocks of birds. The guns came next, and after a whole division of infantry and 128 guns in position had been ridden over, the Kaiser sounded the halt and assembly.

The charge stretched over some three miles of varied ground; it was at a fast gallop; there was no pressing home with a wild run. All the horses were always in hand; there were no bolters nor signs of the mustang blood. The next day there was very much the same sort of a charge, but it was on the end of a twenty-five mile march. On the assembly being sounded, that whole cavalry corps lined up for review in a remarkably short time, and in surprisingly good condition.

Charge

On the first day the Kaiser and his General Staff realized of course that the tactical disposition of the opposing infantry and artillery were such as to make a successful charge impossible; but not considering the enemy, the conditions were good for a charge for instruction of leaders. These are the only times in the year such instruction is possible in Germany. The fact that there are no fences in Germany permits the handling and display of armies in peace time; and no farmer objects to the overrunning of fields and cultivated grounds, as a commission follows closely to assess damages. Last year the Kaiser maneuvers cost the state about \$350,000 to settle such claims.

The German officers believe in training their men so that they will charge anything and anywhere, assuming themselves as the only thinking machines. With these assumptions the only criticism to be made is that of the umpire, who allowed the charges as successful; German officers would think that criticism needless. Then, we and the British remarked many times that the Germans had not had the illuminating experience that the modern rifle shoots into one.

On the whole, maneuvers on this scale are most valuable. Often, during the days of actual contest, the many assumptions and the far-fetched decisions of the umpire were disappointing. But the great chances for instruction not only on the battlefield but the even more valuable two weeks of

mobilization and handling on the march, gives fitting field illustration as a climax to the work of the year.

The points brought home to me many times were:

The General Staff and its thoroughgoing methods and efficient work; the strenuous work required of the subordinate officers, and the strict and severe calling to account for either carelessness or inefficiency; the weeding out of weak sisters and the physical incapables, which all the foreign countries, except England, do.

Every German officer seems to be a special repository for medals and decorations of all kinds. Most of them are worn on a bar which is fastened right across the broad chest. The medals and decorations stand for maneuvers, jubilees, birthdays, and visits of foreign sovereigns. One officer of the Guards, who was an accomplished linguist, assured me that once he had been decorated by eight different countries for simply escorting their representatives to a dinner, and a good dinner at that.

I was rather surprised to find that good linguists stand out in the German army as in our own, and are just as apt to get interesting details. I had thought that all German officers were more or less accomplished in the languages, and that they were required to take a certain course; but it seems to have been about as useful as the West Point course in French, so far as being able to engage in conversation. None of the British officers at the maneuvers spoke German, so that our party was not at a disadvantage. This knowledge of the same predicament of the others gave us a confidence which led one of our chiefs to set the example of putting the burden of proof upon the Germans by asking any new acquaintance if he spoke Spanish, and once he ventured to ask if he spoke Russian.

At the Grosse Lictherfelde School, the foremost cadet school in Germany, only one officer spoke English. Captain von Muhlman, who was at the Centennial Banquet at the Military Academy last spring, and who gave such a very spirited translation of his chief's toast. He is the instructor of English, and a good one. His cadets were keen, and they kept up with their progress in reading by discussion of the mat-

ter in hand. When the English party visited the Cadet School the next week, this same lesson was in progress, so that it must have been the one specially reserved for the gallery. However, I doubt if any French or Spanish official visiting West Point has ever been invited to visit the cadet section rooms in modern languages. The discipline at the German Cadet School seemed to be as good as it is in every other part of the German army.

It is gratifying to note the very general interest which the military students abroad are now taking in our Civil War. They have gotten over the habit of speaking of it as a conflict between armed mobs. We found the most talked about book among military men in Germany and England was "Stonewall Jackson and the American Civil War," by Colonel Henderson of the British Staff College. While visiting Colonel Kitson, commandant at Sandhurst, we were grieved to hear that Colonel Henderson was very seriously ill, and that there was a very general lament going up over his possible inability to finish his projected work on the final campaigns of the Civil War. His work is a text book in both the Staff College and in the Cadet School at Sandhurst. In the section rooms splendid maps of the familiar fighting grounds of Virginia were hung around on all sides. Colonel Taylor, chief of the Staff College, spoke most highly of the reports on the Boer War of Captain S. L'H. Slocum and of Captain Reichmann, both of which are in use in this course. Colonel Kitson, former attaché in Washington, promises to be the General Taylor of the British Cadet School. Things were in pretty bad shape when he took hold. It was one of the most satisfactory experiences abroad to realize how West Point stands out, and to hear the frequent comment and reference to it as a model. Lord Roberts said that Colonel Kitson had talked West Point to him until he told him to go ahead and use West Point methods, and he hoped in the next year to see West Point for himself.

Sandhurst is at a great disadvantage as compared with West Point in a good many ways. The course is only for eighteen months, and the government does not give it very much support in a financial way, so that the school has to

run on the money furnished by the cadets themselves. In addition to a very smart soldierly review turned out by the cadets, rides in the hall and in the open were given for the party, pretty much the same sort as one would see at West Point for the yearling class. The cadets were sent around at the same pounding trot, and the riding master was very particular that they should shake down into their seats and sternly forbade any posting.

In the memorial chapel at the school they were just placing the tablet for the cadets of the school killed in South Africa, and it was a very mournful, long list, containing almost as many names as have been killed in all the other British campaigns since the founding of the school. They had a number of captured battle flags hanging around the chapel, and to avoid the sure disintegration, the silken folds were laid on a stiff linen netting which was hardly discernible at their height. At the Chelsea Hospital, which corresponds to our Soldiers' Home, are hung many of the captured battle flags, and among them were noticeable a number of American flags and standards taken during the War of 1812, mostly at the capture of Washington.

Aldershot, it seems to me, is the most instructive place for the American officer to visit. It is the headquarters and station of the First Army Corps, under the command of that fine cavalryman, General French. There are also numerous schools of instruction, the most important one being for non-commissioned officers from all of the regular regiments of the British army. The British non-com. stands out as the very best type of his class, and is thoroughly trained, and, until recently, has done most of the work in training the young soldier; but Lord Roberts and the most efficient generals of the British army like General French, Generals Kelly-Kenny and Hamilton, after the experiences of the South African War, are determined to have good soldiers for officers and not so many good fellows. Everything at Aldershot was wide open to us, and it was interesting to follow the course of instruction and to have explained their methods, which are so largely changed and improved by the South African War. Every change is made entirely with reference

to the Boer War and the Boer country, as though future wars would be under the same conditions.

The lances and sabers in the cavalry got a black eye, and many of the leading British officers are in favor of abandoning them altogether, while the carbine has been abandoned, and the cavalry is armed with the same rifle as the infantry. The new model is shorter than the old Lee Metford.

*Hance
+
Saber*

There is one point about the British saddle that seemed good to all of us, the spoon shaped extension to the rear of the side bars. Most of the sore backs in the American army are caused by the cantle packs, and the side bars of the McClellan saddle might be extended in the same way to obviate this and to give a larger bearing surface with very little increase in the weight.

The engineers at Aldershot were experimenting with a pack pontoon outfit. On five packs they were able to put collapsible pontoons, chess, balks, etc., large enough to make a raft for ferrying an army wagon or field piece, and they could unpack and lay it in a remarkably short time.

In the artillery branch the most interesting novelty was an experimental harness. Most of the artillery had been thoroughly dissatisfied with the very heavy and cumbersome equipment heretofore used; and one of the experimental sets of harness, by doing away with the collar and saddle and substituting a breast strap, had reduced the weight per horse same forty pounds. In this same equipment they had substituted leather covered wire cables for leather tugs and most simple and handy fastenings for all buckles. With these fastenings (ingenious improvement of toggle) no matter what tension was on the tugs they could be unlinked in an instant.

The English field artillery did not show up very well in South Africa. They are experimenting not only with the minor articles of equipment, but are making strenuous efforts to get a better gun. One of the batteries at Aldershot was composed of Erhart guns, of which about a hundred had recently been purchased by the British government. They seem rather cumbersome in appearance, and this was the only criticism the British officers had to make after a very

short trial. All of their guns were painted khaki color; but they had had some interesting experiments in the chromatic coats for the field pieces, and in that part of England and in the field they were less conspicuous than the khaki colored pieces standing out against the green. They seem to think a great deal of their horse batteries, and only the expense keeps them and the Germans from having a very much larger proportion of such batteries.

Why should not we, with our field batteries, have all horse batteries?

Another result of the Boer War has been a commission to revise the fighting tactics of the British army, chiefly to provide a method for open order fighting. A radical departure has been made from the present way, which seems to date from the day of Braddock's defeat. We did not have much opportunity to see the new tactics tried, for the orders had just been promulgated, but the formation and deployment seemed very much like our old Upton tactics. There was no using of signals, and the squad leaders caused too much noise and confusion during deployment.

As individuals, the British soldiers were far better than any others over there. They are well set up, smart looking, and get splendid training in the School of the Soldier, and they are learning how to shoot. After some long talks with Boer officers, their criticisms of the British crystallizes into the statement that the infantry during the first two years of the Boer War fired by volley, and that the individual did not know how to shoot. British officers were not well trained in finding the ranges. This applies particularly to the artillery-men. The British shrapnel did not have the proper scattering charge. Its effects were nil against troops behind breast-works. This same criticism might be made against our own shrapnel.

The Boers did not seem to fear any of the large guns, and the projectile charged with lyddite and other high explosives had a moral effect for a short time only. But they spoke with some feeling of the rapid fire and machine guns.

It seemed homelike in the British messes to hear the growling and the frank criticisms of each other and of supe-

riors. From these healthy signs I gathered that the Boer War happened like one of ours—not much preparedness, but immediate orders and popular cry of the "On to Richmond" sort; the prompt relief and disgrace of the general who asked for troops and time to properly organize, then a flock of generals sure to be made scapegoats; and, finally, the man of destiny, who has all the time he wants and all the troops he asks for, with the chance to give the decisive stroke and the finishing touches in his own way.

The very hospitable way all of us were treated by the German and British officers will always make me anxious to give every foreign visitor a drink and something to eat and a chance to look around.

Very few of us get a chance to visit foreign armies and the fall maneuvers officially, but a great many officers who are visitors abroad could see everything under the very best conditions by being vouched for by our embassies. Several of our officers and a number of British, on leave, happened in Berlin during the maneuvers, and being thus properly presented, were given guest cards, furnished with transportation, and afforded every opportunity to study the plan of campaign and see the operations. The best way would be to accompany either of the armies from the time of mobilization and on the days of getting into contact.

.9/11

NOTES ON A JAPANESE CAVALRY REGIMENT.

BY CAPTAIN C. D. RHODES, SIXTH U. S. CAVALRY.

THROUGH the courtesy of our Legation at Tokio, the mail brought me at Yokohama a permit from the Japanese War Office to visit the First Cavalry Regiment, stationed in the suburbs of the Japanese capital. Knowing, through previous sad experience, the difficulties of finding one's way about in the city of Tokio, I made an early start from Yokohama by rail, and as I had previously wired for a carriage to meet my train, was soon bowling along towards my destination, some five or six miles from the center of the city. By 9:30, after an hour's drive, we were at the gate of the military reservation.

The Japanese had evidently been duly apprised by the War Office of my visit, for a private of the guard promptly conducted me to the officer of the week (corresponding with sword and sash to our officer of the day), who was seen hastening across the drill ground. In the center of the latter a troop of cavalry was standing to horse. I soon learned that it was waiting my coming.

The officer of the week conducted me to the officer's mess, where I was hospitably received by the commanding officer, Major Baron Nawa, and we were all (according to Japanese custom) soon drinking tea out of dainty cups, and attempting to converse through a well-meaning but utterly confusing interpreter. In fact, I was desperately afraid lest some misinterpretation of my conversation might momentarily create an absurdity which I should be powerless to explain.

Presently I was invited to accompany the commanding officer and his staff, and was told that the entire cavalry regi-

ment had gone out to squadron drill some distance away, excepting a single troop which had very kindly been retained in the post to drill for my special benefit. Arrived at the drill ground the troop was mounted and divided into squads, the officers meanwhile explaining that a Japanese ^{Regiment} regiment consists of three squadrons of four troop each, with 150 troopers to a squadron, and thirty-six to a troop.

The drill began with maneuvers by squads, each directed by its squad commander, wheeling, changing direction, and jumping a low (eighteen-inch) hurdle—all movements at a trot. This continued for some time, when the troop commander assembled his troop and continued the drill by troop.

The troopers were in their heavy uniforms of black cap with yellow bands, blue-black blouse with yellow facings, red trousers with green stripes on the side seams, and boots of black leather. The Japanese are only beginning to experiment with khaki.

The privates were armed with carbine and saber; the non-commissioned officers had in addition revolvers. The carbines were slung tightly over the troopers' backs and seemed to have little or no uncomfortable motion, even when jumping the hurdles. The sabers, of the straight German pattern, dangled from the left hip, and, as our own experience has shown, were decidedly in the way.

The saddles, with fairly short steel stirrups, set well forward, were of the German pattern. The bridles, with trimmings of burnished steel, were of fair leather, having two-ringed steel curb bits, with straight branches and steel curb chain.

The horses were miserable beasts of all colors and conformations. Some, I was told, were purchased from the Germans after the evacuation of Peking by the allies. The animals certainly had the appearance of having been drawn from all quarters of the globe. The native Japanese horses are notoriously undersized, but some years ago the government established breeding farms, which, in time, will probably give the cavalry and field artillery excellent mounts. The country at large seems woefully lacking in draught animals.

The troopers sat straight in their saddles and preserved excellent alignment, intervals and distances throughout the drill, which was in double rank. As they clung to their mounts with the "bent-knee seat," I could not help thinking how much better appearance they would make, to say nothing of security in the saddle, with our own unrivalled McClellan saddles. Throughout the drill reins were held in two hands. In taking the hurdles the troopers did not seem to be firm in their seats, although no mishaps occurred. The Japanese do not seem to be natural riders; and considering this and the poor quality of the mounts, the fair proficiency of those whom I saw has doubtless been attained through a vast deal of hard work.

The drill was concluded by assembling the troop in double rank, dismounting to fight on foot, deploying a line of dismounted skirmishers, advancing, firing and retreating. This portion of the drill was excellent, the troopers deploying with celerity and without the least confusion.

It was noticeable that when dismounting to fight on foot, *all* the troopers dismounted, six or eight horses being held by one trooper. In this way the troop commander was able to put more of his men on the firing line; but the horse holders, encumbered with so many led-horses, seemed unable to move about as quickly as seems desirable from our point of view.

Moving across the drill ground, we passed through one of the squadron blacksmith shops. It was noted that all the shoes were hand made.

The stables were roomy frame structures, the stalls being in the usual two rows, horses facing inward, with wooden partitions between single animals.

It was noticeable that the stalls were floored with wood—something we have long ago discarded in favor of clay. The stables were faultlessly clean. The equipments hung from pegs along the walls, each set opposite the respective horse; while above each stall, in Japanese characters, was written the horse's name, age and weight, and the name of the rider.

The troops being at drill, the stables were more or less empty, but as we approached each stable, a stable orderly double-timed towards the commanding officer, halted, saluted and shouted in a voice which could be distinctly heard fifty yards away, the number of horses in the stable, the number out and the number on sick report. This seemed to be as much a requirement as our turning out the guard for the commanding officer. It seemed an excellent idea and worthy of adoption.

We next visited the barracks, unpretentious but commodious frame buildings of wood, divided into small square rooms to accommodate ten troopers, five wooden cots being ranged along each side of the room. In the open space between was a rough mess table. Japanese soldiers are very easily subsisted. At mess call, each squad repairs to the kitchen, receives its meal of rice, fish, tea, or other components of the ration, and carries it to the squad room. Wooden bowls and chop-sticks simplify the question of dishes; and one may rest assured there are no complaints about the quality of the beef, or the amount of sugar in the coffee!

After more tea and cigarettes, with many expressions of mutual good will, in which the unmistakable friendliness of the Japanese towards our country was very much in evidence, I took leave of the hospitable cavalry officers and departed.

It seems quite apparent that the Japanese cavalry is, in efficiency, far behind the infantry and artillery, which, as we know, are in the first rank. As has been noted, this inferiority may be traced to the poor quality of the mounts, as well as to the fact that riding is not a natural accomplishment of the Japanese recruit. But with the patience and rare intelligence which has marked the wonderful development of this country along other lines, it may be confidently predicted that these admirable soldiers will, before many years, make good their cavalry deficiencies, and astonish us with their mounted troops.

9/2/11

THE COSSACK. 9/2/11

BY CAPTAIN KIRBY WALKER, FOURTEENTH U. S. CAVALRY.

In considering the military character of the Cossacks it is necessary to know something of their origin and history. It is a matter of controversy as to whether they came into Russia as a horde from the east or whether they have been conglomerated into a national body through a long course of time from various fragments of roving or fugitive neighboring tribes. At any rate, it is known that about the middle of the fourteenth century a strong and active community of these people existed upon the banks of the southern Dnieper and of its tributaries. Here they were joined by bands of hardy refugees from neighboring regions, and their numbers greatly increased.

In the sixteenth century they were enrolled among the vassals of Poland, whose king united the more ardent adventurers among them into a strict military confederation, not unlike in some respects the orders of knights which had sprung up in Western Europe for the defense of Christendom. The members of this organization were bound by a vow of celibacy and recruited their ranks by kidnapping children. Freedom and independence were of the first necessity among them, and this independent spirit is well shown in the fact that their services were alternately loaned to Poland, Russia, Turkey, and even to the Tartar Khan.

In the seventeenth century the extortions of Polish officials and the persecutions of Polish Jesuits exasperated the Cossacks, who belonged to the Greek Church, and their insurrection was stained with the wildest deeds, and ended in their submission to Russia. But the new rule also proved oppressive, and a part of the tribe were ready to follow the

famous Mazeppa when he joined Charles XII. of Sweden against Russia. This revolt brought on them the bloody vengeance of Peter the Great, and many of them fled to the Crimea, to return under the reign of Anne, only to be again expelled because of their obstructive policy to the civil settlement of the country. Their last revolt in the early part of the eighteenth century was so wild and bloody, and at first so successful, that Catherine II. was compelled to use all the forces of the empire to quell it. Since that time the chief object of the government has been gradually to deprive them of their independence by transforming their bodies into more regular military organizations.

For over three centuries these people were engaged in almost constant warfare; now in revolt against Russia or Poland, now fighting the Turks, the Caucasians, the Tartars, or other wild tribes. Gradually brought under a more rigid military discipline, this restless and warlike race has furnished the empire of Russia with one of the most valuable elements in its national army, and their services in the protection of the frontiers from the Caucasus to China are almost incalculable. They now occupy the southern and southeastern part of the empire, and the most powerful and numerous tribes are the Don Cossacks and those of "Little Russia." Four or five other tribes furnish their contingent of men to the army. The Cossacks of the Asiatic armies constitute less than 20,000 men and need not be considered in connection with a European war, except for the indirect effect they would have by operating along the British-Indian border in case of a war with England. The Cossacks still form the outposts of Russian authority in Siberia, the frontier of China, and the Caucasus.

The Cossack soldier is ubiquitous. He may be seen at Odessa on the Black Sea, at St. Petersburg on the Baltic, at Warsaw and Moscow in the interior, along the Ural Mountains, in Siberia, on the British-Indian frontier, in Manchuria, and at other places where patience, endurance and fidelity may be desired by the government.

The armed strength of Russia, consisting of over 500,000 men, peace footing, is divided into regulars and irregulars. The

Russian Army

regulars are subdivided into the active army and the reserves, and the irregulars into the Cossacks and the native troops of Asia. There is also a militia, which has no military organization, but furnishes recruits to the reserves. The term "irregulars" is rather misleading, for, in a strictly military sense there is but little difference between certain portions of the Cossacks—especially those of the Don—and the regular troops. A Don Cossack regiment forms one-fourth of each of the seventeen cavalry divisions of the active army in time of peace as well as in war. That is to say, the Don Cossacks alone have 13,000 men in active service all the time. Every Don Cossack is obliged to perform military service, and substitutes are not permitted. The only exceptions are priests, physicians, teachers, etc., and those who have suffered from fire, inundation, or other misfortunes, and cannot be spared from their homes; also, of course, those who are physically incapable. What applies to the Don Cossacks is mainly true of other tribes, and differs only in detail. The general distinction between the Cossacks and the so-called regular troops may be said to consist in the fact that the Cossacks manage their own affairs, whereas in the regular regiments the government manages everything for them. The Cossack population is exempt from taxes, and in return renders military service without pay. The government furnishes a Cossack his arms and ammunition, but everything else he provides for himself when in service. He is given an allowance in lieu of rations and forage, but his horse, saddle, uniform and equipments are his own property. The peace strength of the Cossacks is about 56,000 men, and their war strength 153,000. Of this number there are several batteries of horse artillery and a few battalions of infantry.

Strength
Russia draws over sixty per cent. of her cavalry from the Cossacks, and they are the characteristic light cavalry of Europe, being armed accordingly. The non-commissioned officers and musicians carry the revolver and "schaska," or curved sword, and the privates are armed with the schaska, lance and musket.

Equipment { The "schaska" is a single-edged, curved sword, thirty-five inches long, handle of wood, without guard of any kind,

scabbard of leather. It is worn suspended, not from a waist belt such as we wear, but from a small shoulder belt, passing from one ring of the scabbard over the shoulder to the other ring. The two parts of the belt are fastened by a connecting piece about six inches long at the level of the waist, or a little higher.

The carbines are protected by a leather case and are always worn slung over the shoulder from left to right, the muzzle up and projecting above the left shoulder, the butt behind the right thigh. This method of carrying the carbine was adopted after competitive trials between it and the method formerly used in our service. It is also the manner in use from earliest traditions among the Cossack tribes, which probably influenced the decision in its favor.

The lance is nine or ten feet long, shod with iron, and weighs about four and one-half pounds. At its base is a leather loop, through which the foot is passed before placing it in the stirrup, and which supports its weight. Opposite the arm is another and longer leather loop through which the arm is inserted to steady it.

The revolver is the Smith & Wesson, made in this country. It has a ring in the butt of the stock, through which passes a cord that is worn around the neck. This prevents it from dropping from the hand or being lost.

The saddle is made of wood, the tree high up from the horse's back, the pommel and cantle high and nearly vertical, and the space between pommel and cantle filled with a large hair cushion covered with leather, and held in place by a surcingle. This makes the rider's seat almost flat and from six to eight inches above the horse's back. The Cossack rides with a very short stirrup, and his feet are always above the line of the horse's belly, thus making his seat appear forced and unnatural. He defends this style by saying that it removes all unsteadiness in the saddle, and, therefore, the horse, being relieved of such involuntary balancing of the rider, carries its burden more easily. On the other hand, he claims that when long distances are to be traversed, the natural weariness resulting from the deep seat and long stirrup, lead to the fact that the rider, having no strong support,

air cushion

sits unsteadily in the saddle through fatigue, which, in its turn, brings a needless weariness to both horse and rider. The snaffle bit is used.

Knout in place of spur

Like our Indians and cowboys, the Cossacks train their horses to lie down, also to stand still and graze while they dismount and walk off some distance. Instead of spurs, they carry the "nagaika," or knout, a whip with a short, thick handle and a heavy lash. In a Russian text-book for Cossacks is written: "The knout belongs to every Cossack, from the general to the meanest private, and should not be stuck in the bootleg." It is difficult to understand the persistence with which the Cossack armies have stuck to this implement, for it would seem that a man who has to handle several weapons in action, besides managing his horse, must be better served by disposing of this encumbrance.

Riding

Cartridges are carried in two pouches on a waist belt. The Cossacks wear high boots reaching nearly to the knee. In place of socks they wear a piece of linen in summer and woolen cloth in winter wrapped around the foot. This primitive affair is said to have the advantage of not wearing out, of being easily washed and aired, and, when properly put on, of never chafing the foot.

We naturally associate the name Cossack with good horsemen, and, as a matter of fact, this name is derived from a word meaning "light mounted horsemen." He is a natural horseman, being trained to it from early boyhood, and this training is kept up to a more or less degree throughout his life. The Cossack is so often pictured in the act of doing daring things with his horse, that it is common for one to think that all Cossacks are up in this work. As a matter of fact, it is only a small and select portion of them that are skilled in these exercises, and they are stationed where their feats can be shown off to the most people. In justice to the Cossack, it has been shown that it is not the sentiment of self-preservation that has caused him of late years to dislike these exercises. In most cases it has been observed that falls while exercising generally did more harm to the Cossack's horse and equipments than to the Cossack himself, and in consequence thereof his fear of spoiling his horse or

breaking or tearing anything expensive to repair, are the only circumstances to induce him to evade the exercises.

The military authorities try to encourage these acrobatic cavalrymen, particularly when they indulge in exercises that may be turned to practical account in war. The time was when foreign wars gave the Cossacks such great opportunity for plunder that they could look with indifference upon the loss of a horse or saddle. To-day, it is different; he has few perquisites and practically no pay. More time is naturally given to the most useful exercises, the final object of which is to develop every accomplishment in the management of horses and arms that would be required to defeat the enemy. Good shooting in every direction at any gait, using the saber in every position of the rider, rapid horse throwing with immediate firing from behind the horse, rapid mounting with unexpected saber attack—these are only some of the results attained.

The riding of the Cossacks, when seen for the first time, strikes one as remarkable, but not more so than that performed by our best cavalrymen. It is noticed that the Cossacks make a judicious use of their saddles and stirrups while going through their feats, while our men perform theirs with or without these articles. For example, in the feat of standing upon the head while the horse is galloping, the Cossack does not in fact stand upon his head, but leans on the saddle with his shoulder and grasps straps attached to the saddle on each side, and in standing up in the saddle his feet are not in the saddle at all, but in the stirrup straps at the buckle with his feet and ankles braced against the sides of the saddle; and the trick of leaving the left foot in the stirrup, and dragging the right foot along the ground, at a gallop, is not at all difficult with a trained horse.

The favorite drill of the Cossacks is called the "lava," which formation, according to the Russian regulations, "is used not only in the attack but also for purposes of maneuver, and particularly in cases where it is desirable to avoid conflict with a solid body of the enemy, but at the same time desirable to constantly harass him or to wear him out upon his front or flanks, or to coax him to attack in open order, or

*Cossack
vs
U.S. Cav.*

"lava"

to engage him in single combat, in which latter particular the Cossacks, by means of their skillful management when alone, are expected to be superior to regular cavalry accustomed to move in solid bodies." The lava is an enveloping movement, made rapidly and in dispersed order. If charged by the enemy, the Cossacks, like our Indians, give way quickly only to re-form promptly and attack in their turn. It was the invasion of Russia in 1812, that first brought into prominent notice the peculiar tactics of the Cossacks, who contributed more than any other troops to the overthrow of Napoleon.

General Morand describes the Cossacks as follows :

"These natural horsemen are not organized in divisions; pay no attention to regular alignments and the order so highly prized by us; clasp their horses tightly between their knees; rest their feet in great stirrups, which serve as supports to them when using their weapons, so that they can bend their bodies forward to deliver a blow, or backward to avoid one. Trained to pass at once from the halt to the gallop and from the gallop to the halt, their horses second their dexterity, and appear to be part of themselves. These men are always on the lookout, move with extreme rapidity, have but few wants, and warlike thoughts are the only ones that can arouse their interest."

The lava movement, spoken of above, was practiced to perfection in that campaign. In executing the lava, firing was generally employed, but since the grand maneuvers of 1891, it has been recommended that any attempt to fire from the saddle should be effectually stopped. Years ago the Cossacks, with few exceptions, were so familiar with the use of the rifle from boyhood, that shooting from the saddle was as natural to them as to the American Indian.

With firing

What distinguishes the Cossacks from the ordinary Russian soldiers of the line is their individuality. The infantry soldier expects to have everything arranged for him. Left to his own resources, he is almost helpless. On the other hand, the Cossack is never so well off or so useful as when thrown upon his own resources, with only general instructions; he never fails to find food for himself or horse; he invariably has on his horse a miscellaneous collection of odds

and ends, comprising everything necessary for his comfort at all times, and he is unusually well trained in everything which goes with us by the name of "plainscraft." All his arms and equipments are so well contrived that they never make the slightest noise; he and his horse do not know what fatigue means. If the commander wishes to send a communication to a distant column the exact position of which he does not himself know, he simply gives the letter to a Cossack, who is bound to find a way of delivering it. As guerillas the Cossacks have not their equal.

All accounts prove the inestimable value of the Cossack in everything pertaining to the service of security and information. De Brack says, referring to the 1812 campaign:

"The Cossacks rendered military operations very dangerous, especially for the officers charged with the duty of making reconnaissances. Many of these, and especially the officers of the headquarters staff, preferred to send in reports obtained from peasants to exposing themselves at a distance to the attacks of the Cossacks. Under such circumstances it was impossible for the Emperor to keep himself properly informed in regard to the enemy."

The march of the grand army was first delayed by the Cossacks, and later they cut it off from every source of supply, and swarmed around its flanks like savage bees.

During the war of 1877-78 for the first time Caucasian Cossacks were employed by Russia in Europe. Although well instructed in drill, their greatest usefulness was in following up a disorderly retreat, when they cut down the fugitives without mercy. After the battle of Lootcha they followed the fleeing Turks and sabered 3,000 of them—nearly twice their own number. While Gourko was crossing the Balkans, this same brigade captured a train of 200 wagons and sabered the last man of the two or three companies forming its escort. On the other hand, at the second battle of Plevna, a half dozen squadrons of these Caucasians, under Skobeleff, fighting on foot, held their own all day against a brigade of Turkish infantry.

A good illustration of another use the Cossack may be put to is furnished by a notable excursion down the Amoor

X
see
Russian
War.

River which resulted in filching from China one of her most valuable possessions. Russia wanted the Amoor River as a line of communication eastward. China was approached on the subject, and, according to her custom, let the matter drag so long that the governor of the eastern district of Siberia decided to occupy the river first and ask permission afterwards. Accordingly when the Chinese government had made up its mind to inquire what the Russians were doing on their territory, the whole of this valuable country was picketed off by a line of Cossack colonists, and by the time this forced colonization ceased China found herself bounded on the north-east by about sixty-seven Cossack posts or settlements, with a total of 12,000 souls.

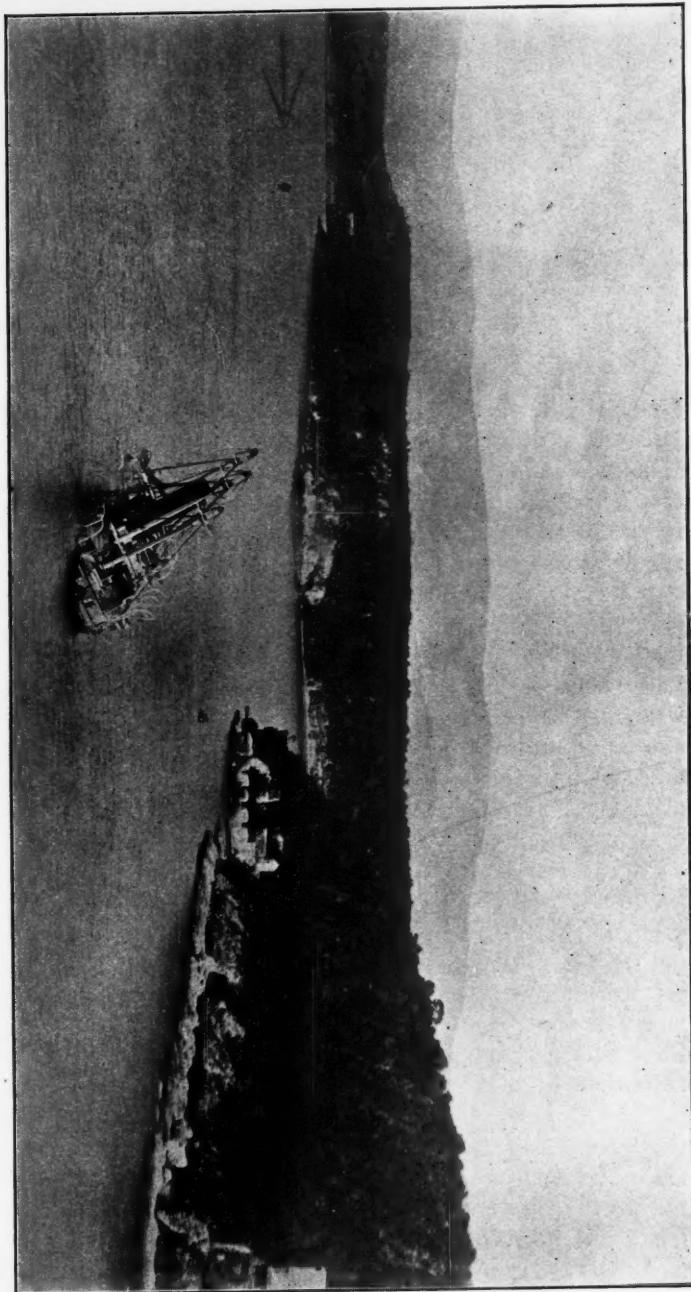
It is proper to inquire of the future of the Cossack. Russian officialism is attempting to curb his independent spirit, but it is safe to assume that he will be heard from in future wars. He is a bold rider and horseman and he is skillful in the use of all his weapons, two of the prime requisites of a first-class cavalryman. He is from boyhood learning the things that we attempt to teach within a space of three years. If Russia should engage in war with a neighboring nation the Cossack would be invaluable as a screening and reconnoitering force. To attack in masses or solid lines or to receive such an attack, they would probably be inferior to regular cavalry, not because of timidity or cowardice, but because it is not their style of fighting. As a colonizer the Cossack cannot be replaced. The empire of Russia has to-day a line of Cossack stations or outposts all along its southern frontier from the Black Sea to the headwaters of the Obe River in the Altai Mountains, and from the neighborhood of Irkutsk uninterruptedly to the Pacific coast opposite Japan, a distance by land about as great as it is by water from Japan to California.

9/2/11

See
Russian -
Japan - War

WRECK OF THE SPANISH "REINA MERCEDES."

—> @MOKESTACK OF SUNKEN MERRIMAC.



A WOMAN'S GLIMPSE OF THE WAR WITH SPAIN.

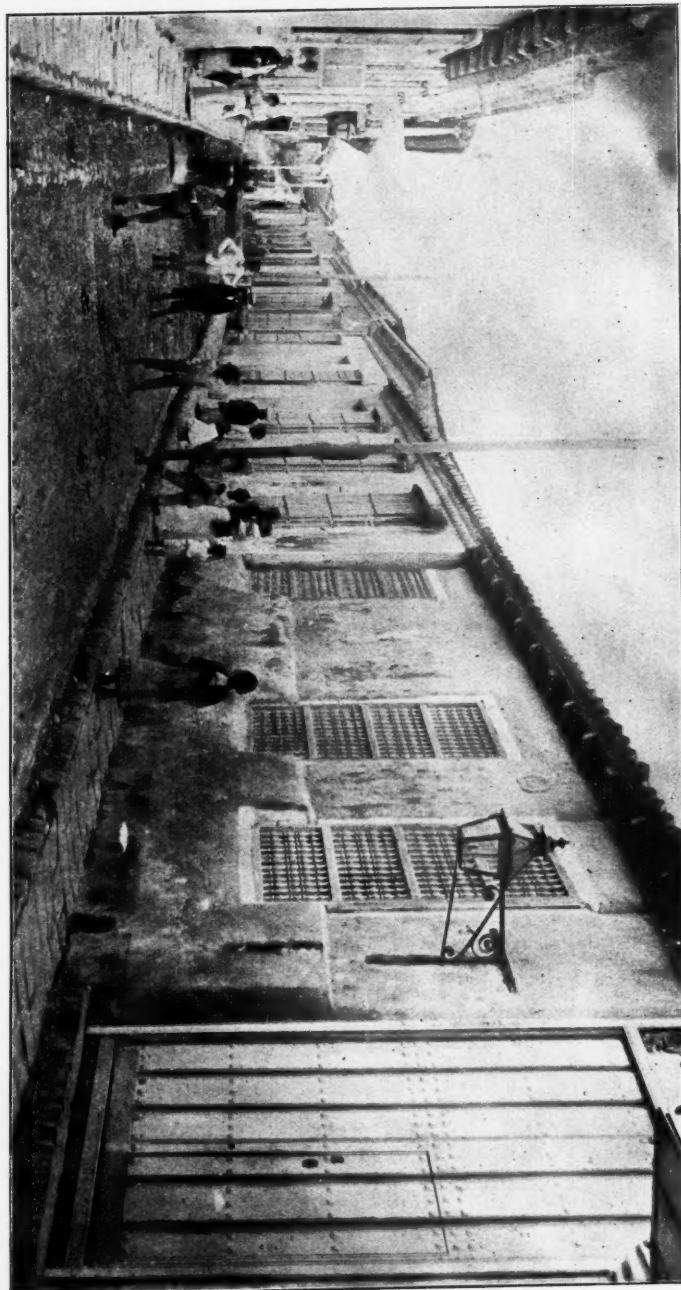
By ALICE C. SARGENT.

9/1/11

THE year 1898 found me in a little army post away up in the mountains of New Mexico, with Navajo and Zuni Indians for neighbors. But we were not too far out of the civilized world to fail to hear the terrible news of the blowing up of the battleship *Maine*, nor too isolated to hear the rumor of war and to see the gathering war clouds.

One night in April the summons came; we were to be ready in five days to start for the rendezvous at Chickamauga. And then followed a scene of activity. Our household goods were packed to be stored until what time no one knew. How could we foresee that four long years would roll by before we would again set up our household goods and gods in a garrison in the United States. How little had any one of us dreamed that war would come into our hitherto peaceful lives. It seemed to me, with my heart filled with bitterness at the fate of the *Maine* and with compassion for the starving Cubans, that the avenging and succoring army would never be ready to move. But at last they were gathering; from east and from west, from north and from south came our hardy soldiers, as fine a little army as the world had ever seen; and there on the historic battlefield of Chickamauga comrades clasped hands who had not met for twenty years.

Then followed busy weeks full of changing scenes, until the 8th of August found me on a transport bound for Santiago, the deck crowded with eager-eyed volunteers sent to relieve the shattered and broken remnant of those who had borne the brunt of the fight. When we ran into Santiago



STREET IN THE CITY OF SANTIAGO, CUBA.

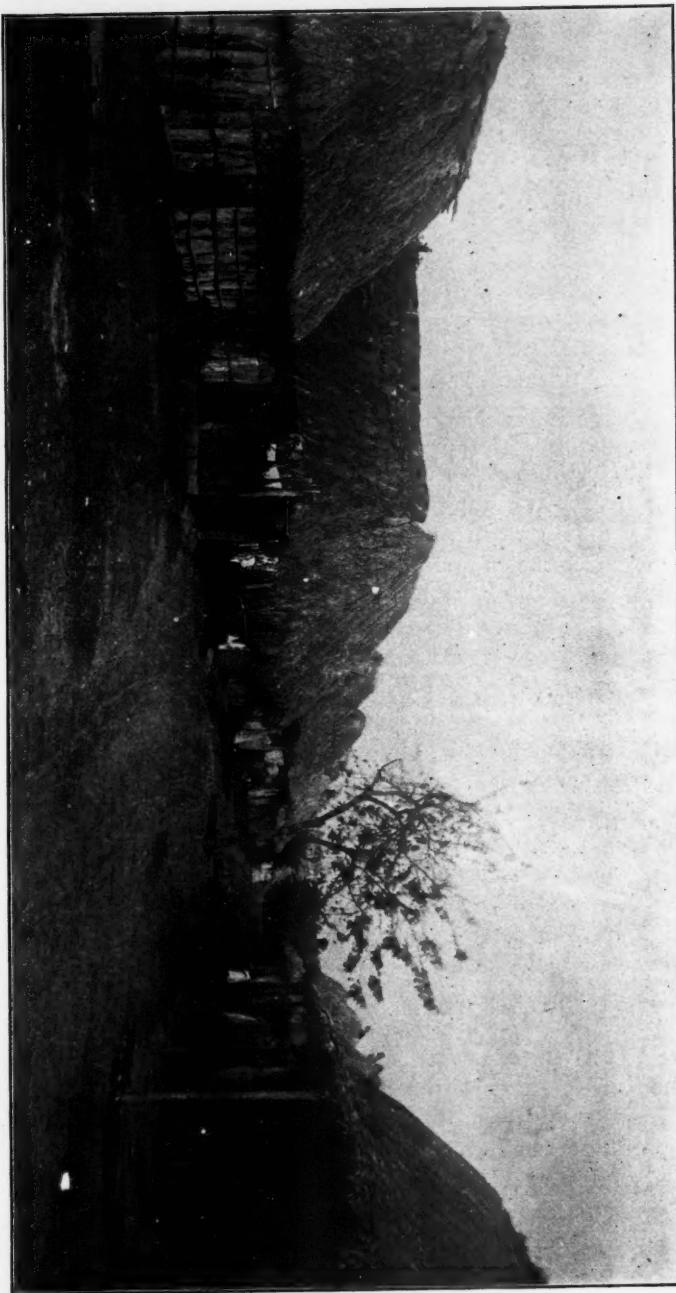
harbor we saw, instead of the crimson and yellow banner of Spain, our own stars and stripes floating from the grand old castle of the Morro. Away up on the ramparts walked a man in the uniform of Uncle Sam. I took out my handkerchief and waved it frantically around my head while he took off his helmet in an answering salute. Slowly we ran in past the wreck of the Spanish battleship *Reina Mercedes*, past the sunken *Merrimac*. scene of one of the most heroic deeds of history :

"Heedless of death and din—
Steered they the vessel in—
These are the men who win
Undying glory."

How we impulsive Americans make unto ourselves ido's and soon find them clay. How soon, alas, do we forget!

On August 12th we dropped anchor in the harbor, and on the following day the regiment was disembarked and marched into camp on the high ground near the city, and here on the hills of Santiago, we set up our tents and prepared to fight disease and death as best we might.

Never will I forget my first impressions of the city of Santiago as we climbed up the narrow, rough and filthy streets on our way to the hilltops, past thatched huts where half starved Cubans clothed in rags, and little brown children clothed not at all, peered at us from the low doorways. The great guns that had bellowed death were still; their smoke had drifted away; a strange brooding stillness was over everything. Not even the note of a singing bird broke the silence; and over the city and camps on the hilltops circled the horrible vultures. There were hundreds of them slowly circling all day long, their black shadows on the ground multiplying them into hundreds more. They became doubly repulsive to us when we were told how our wounded men, trying to make their way back to the temporary hospital at "Bloody Bend," had to beat them off with their guns, and how one poor boy had been found, his ghastly face turned up to the sky, and his rigid fingers gripping the neck of one of these hideous birds. The hilltops were covered with creeping and crawling things, little brown lizards, land crabs from



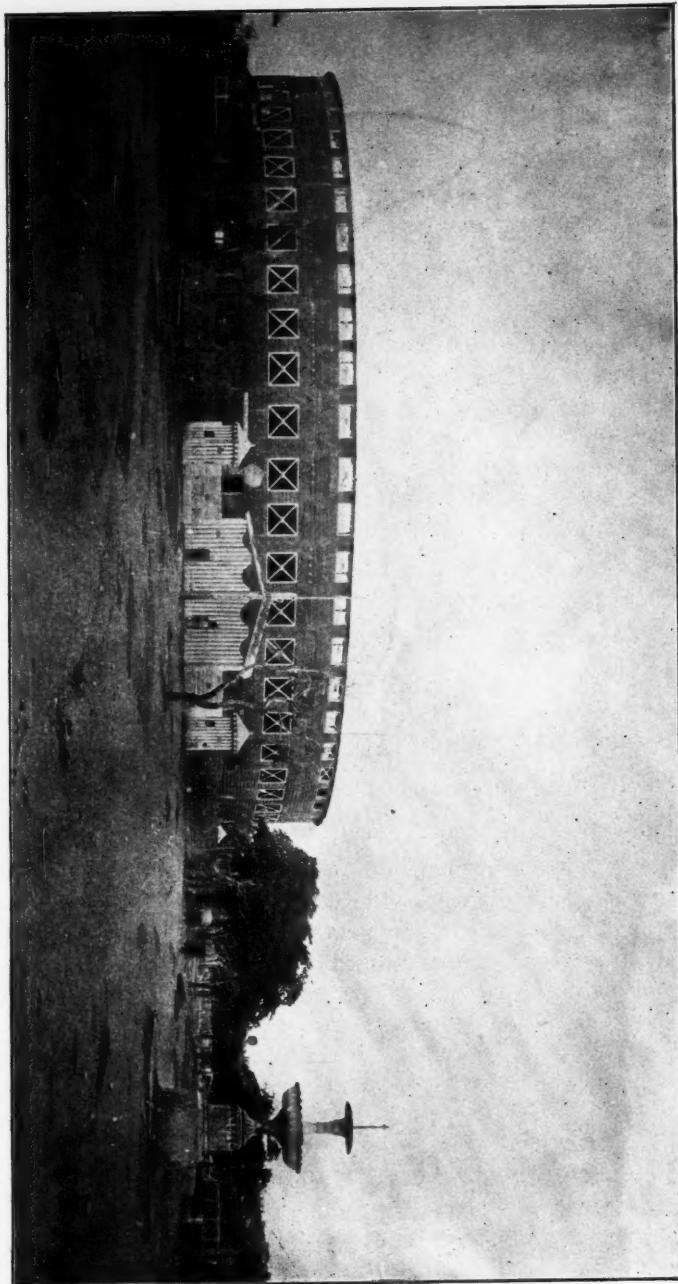
THATCHED HUTS, SANTIAGO, CUBA.

a wee brown thing the size of one's thumb nail to great horny creatures as large as a man's hand and most gorgeous in coloring, black and crimson, and orange and black. When one of these uncanny creatures came shouldering his way towards you he looked like a veritable imp of Satan. But most objectionable to me of all were the frogs—queer, flat, clay colored, and always cold and clammy. Of course we never came into contact with them of our own free will, but they had a way of forcing their acquaintance upon one which was decidedly disagreeable.

One afternoon I had my horse saddled and rode with my husband into the city to see the Spanish prisoners who had been brought down to the water front to be embarked for Spain. Hundreds of them were gathered under the sheltering balconies along the Alameda. Black haired, olive skinned fellows in wide brimmed hats of white straw and worn uniforms of pale blue. I did not see a single brutal face among them, and I have yet to see the first drunken Spanish soldier. Three hundred of these poor soldiers, wounded, worn with fever and hard campaign, died on the homeward voyage.

Our own men were being marched down to board the transports for home. They were only ghastly wrecks of the splendid men who had landed at Daiquiri only a few short weeks before. I talked a little while with a member of a volunteer regiment, the Ninth Massachusetts. He said: "I've stood it pretty well myself, better than most; but we've lost a lot of our fellows; a lot have died of yellow fever, and some have died there on the dock; the ship wasn't there, and they were so weak they died." Down on the hot dusty boards, with no shelter from the scorching sun, they had died waiting for the ship which was to carry them home.

I went out over the battlefield, upon San Juan hill, past the graves where our men had been buried where they fell. Up above the trenches, which our soldiers fought and died to win that scorching July day, I gathered a little bunch of yellow flowers; I have them still. Just outside the city was the Spanish bull ring, a huge circular structure, but the great gateways were closed. As I rode around it I tried to picture



SPANISH BULL RING NEAR SANTIAGO, CUBA.

the scenes of past days when the vast amphitheatre was packed with the shouting multitudes.

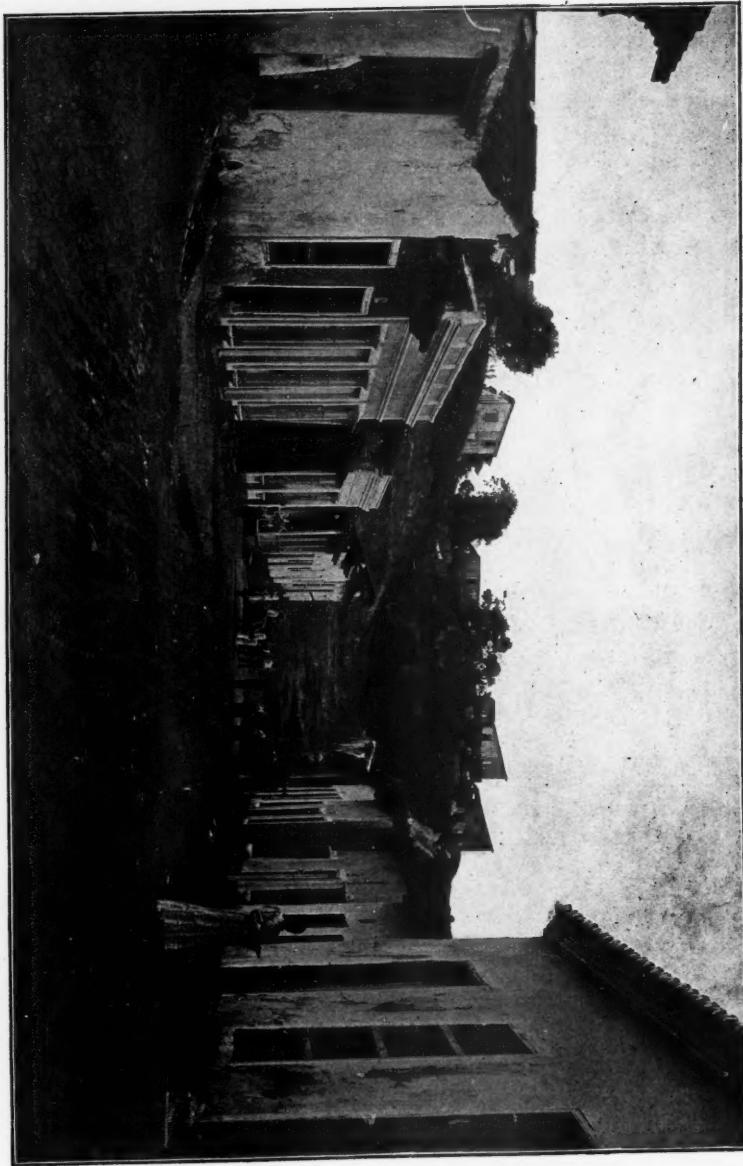
Then followed months that now seem more a dream than a terrible reality. Months when the drenching tropical rains poured down until the air seemed full of hot steam, and our tents turned black with mould; when our men sickened and died of the terrible fever, their parched lips babbling of wife or mother and the home they would never see again—died and were buried under the drooping palms on the green hillside.

For some unexplained reason we were for many weeks without mail. Many of our men who had families at home were almost frantic. We seemed almost cut off and forgotten by the outside world. Nearly all were homesick. Pitiful as it is to see men die of fever, it is more pitiful still to see them die of homesickness—how pitiful only those who have had the experience can know. The pernicious malarial fever was our most persistent foe, against which we had to keep up a constant fight. One of our gallant captains who looked upon the men of his company as his children, and cared for them accordingly, had them lined up every evening and administered to each man with his own hands so many tablets of quinine; "salvation balls" the men called them. This company had the best record for health of any in the command.

With the close of the rainy season in October and the coming of cooler nights an improvement in the situation was apparent. Some generous-hearted philanthropist at home sent a ship loaded with ice for the use of the troops at Santiago. No words of mine can express the comfort this brought to the fever-stricken camp, for day and night our very souls had cried out for just one drink of cold water; even our dreams were filled with the terrible thirst.

With the coming of the winter months preparations were begun to remove the bodies of those who had died in Cuba. I used to sit in the door of my tent and watch a transport swinging slowly at the pier just below our camp. They were cording up on the deck long boxes of yellow pine, and day after day the work went on until the decks were piled

TYPICAL HOUSES IN SANTIAGO.

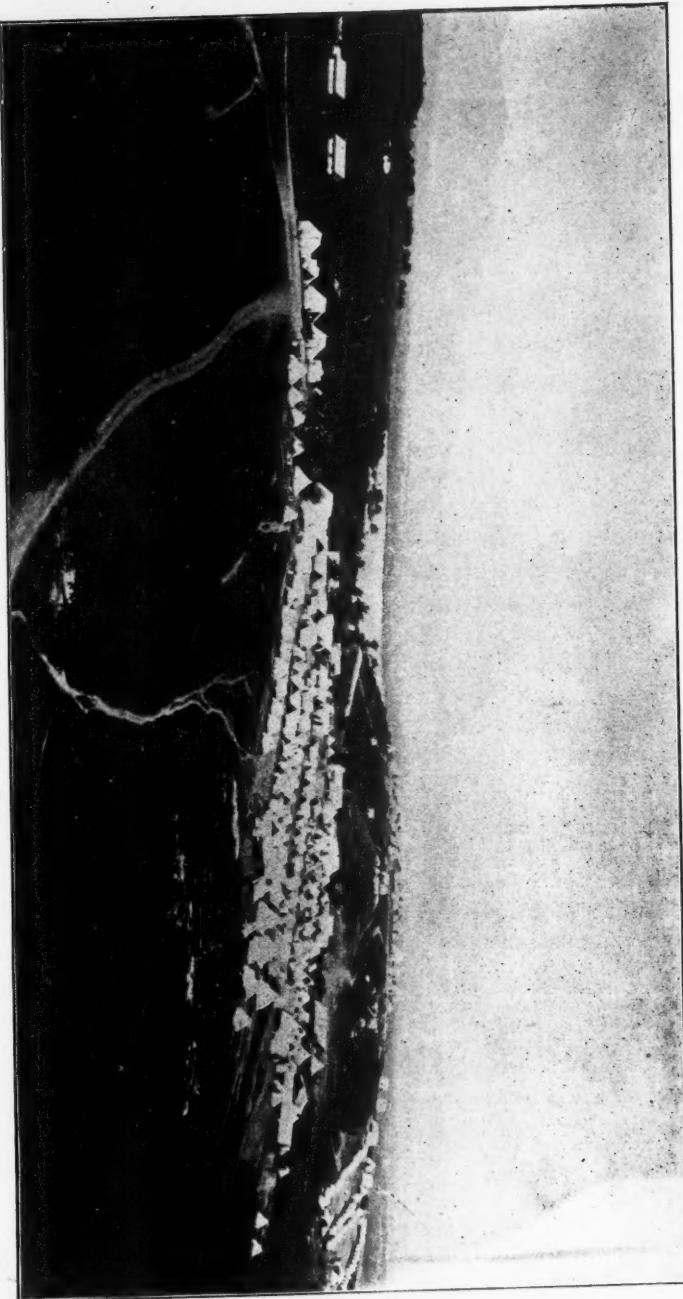


high with long rows, box on box, in every one the body of a soldier who had died that Cuba might be free. They were sending another army home, but not with tramp of feet and fluttering banners and roll of drums would it return, but slowly, silently, sadly, with drooping flags and muffled drums —the grand army of the dead.

Now spring was at hand, and still the fever did its ghastly work, and when an order came for the regiment to move to Guantanamo, sixty miles east of Santiago, the relief it brought was good to see. Any change from the camp, where all had suffered more or less, was gladly welcomed. At Guantanamo the men had barracks built of wood, an improvement on tent life in any climate, but especially so in the tropics. Here I had a house to live in. After eight months of tent life it was a pleasure. This house had been the home of a Spanish officer at the beginning of the war, and in it we found five coal-black cats, which my Barbadoes maid declared were the ghosts of Spaniards left to guard the place.

A few months at Guantanamo and then came tidings that filled our hearts with joy. We were going home—back to our beloved America; and when our joyful eyes beheld the shores of the home-land, my only regret was for the comrades we had buried under the drooping palms on the hills of Santiago.

9/1/11



CAMP OF FIFTH U. S. VOLUNTEER INFANTRY, NEAR SANTIAGO, CUBA.

ARMY TRANSPORTATION BY LAND AND WATER.

By CAPTAIN CHAS. G. SAWTELLE, EIGHTH U. S. CAVALRY.

THIS subject is so comprehensive in scope that it cannot be covered in its generality in a magazine article. In treating it specially, as I do in giving the history of the transportation of General MacArthur's division in the advance from Manila to San Fernando, I fulfill the requirements of the caption, for the transportation was, for a part of the way at least, by land and water, mixed, commonly called mud.

On February 4, 1899, I was chief quartermaster of the Second Division Eighth Army Corps. It had been my policy to turn over all transportation to the absolute control of the quartermasters of the different organizations, and hence it was that when the hostilities began every organization knew how much transportation it had, and had it for immediate use. This transportation was amply sufficient for needs of the troops when in peaceful occupation of the city and trenches. However, when on Sunday morning, February 5th, our troops moved forward, the ever-increasing length of line, the necessity for hurrying ammunition and supplies to the firing line, and the desertion of a number of natives with vehicles, caused an increased demand for transportation, which demand was met by impressing suitable carromatas, quiles, caratellas and bull carts. It was ordered that in every case a receipt should be given for same, and this was generally done, so that eventually nearly every vehicle and animal, so seized was returned to its owners and payment made according to a scale of prices fixed by a board of officers.

During the entire advance all wants of the organizations were filled by the regimental quartermasters requisitioning

on the division quartermaster, who obtained the supplies and transportation needed and invoiced them to the regiments, "decentralizing" as far as possible and making the regiment the unit of quartermaster administration wherever practicable. To the credit of the regimental quartermasters and commissary officers may be pointed the fact that on Sunday evening, February 5th, the men were all served their rations, and in some cases shelter tents and blankets, where they lay on the fighting line, within an hour of the cessation of fire; and these men had advanced from the city, carrying nothing but their arms and ammunition.

When Caloocan was taken, February 10th, there was found at the car shed there five dismantled engines and about fifty passenger coaches and over one hundred freight and flat cars. An efficient train crew and corps of mechanics was organized, with Corporal Haisch, Twentieth Kansas Infantry, as chief engineer, which assembled four of the engines, and on February 12th a train service was established, running two trains from Caloocan to Manila and three trains from Manila to Caloocan, daily, greatly simplifying the transport problem. The steam tramway was found to be in working order, and that was set in operation February 11th, but soon it was found that the railroad supplied all needs, and the tram service was discontinued.

The almost universal good behavior of the Chinese drivers of the buffalo carts, when under fire, led to the recommendation of their employment for service as litter bearers, and if the experiment succeeded, to hire them as transport coolies; accordingly, March 12th, I received authority to hire 150, which were secured at \$20.00, Mexican currency, per month each and a ration. I believe the Chinese would solve the transport problem of an army operating in Luzon in the dry season. For an advance into hostile territory I would urge that 100 coolies per battalion be employed in addition to the transportation in the hands of the regiments, and moreover, that the Chinese coolies be brought under contract from Hong Kong to Manila, since being strangers, the chance of their deserting would be greatly lessened, for they would fear to run away.

The proportion of coolies to soldiers employed by Japan in the war with China was 15,000 coolies to 24,000 men, but no other transportation was used.

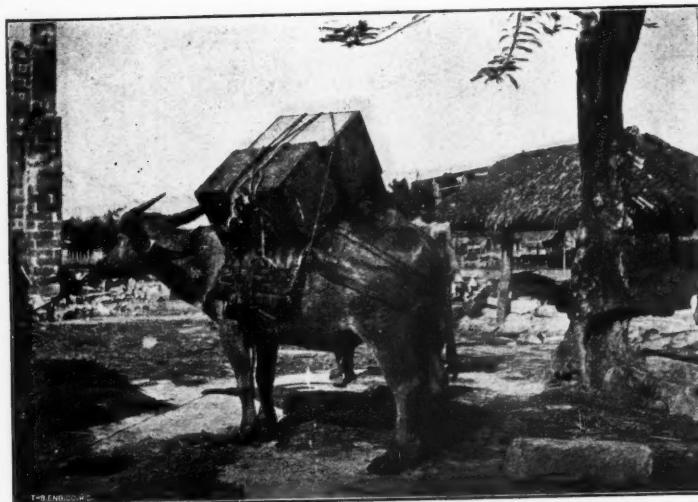
On March 25th the division began its advance on Malolos, and the First Colorado Regiment, for all purposes of quartermaster administration, became a separate regiment. Additional transportation was secured and distributed so that the division wagon train, formed at La Loma Church the morning of March 25th, was constituted as follows:

	<i>Four Mule Teams.</i>	<i>Bull Teams.</i>	<i>Pack Horses.</i>	<i>Pony Vehicles.</i>
FIRST BRIGADE—				
Third Artillery	2	13	8	..
Twentieth Kansas	2	20	8	2
First Montana	2	12	8	3
SECOND BRIGADE—				
Tenth Pennsylvania	2	11	10	4
First South Dakota	2	11	27	3
First Nebraska	2	18	10	4
Fourth Cavalry	3	2
Artillery (Utah and Sixth)	2	4

The regimental quartermasters were in charge of their own transportation, on which was loaded ten days' rations and at least 350 rounds of ammunition per man, the regimental impedimenta and intrenching tools. The transportation being fresh, the weather cool, and the loads, daily decreasing, were heavy—from 1,400 to 2,000 pounds per bull cart and 4,000 to 5,000 pounds per escort wagon. A good unit of loading in cool weather over fair roads I have found to be about 500 rations per bull cart and 1,500 rations per escort wagon; while under unfavorable condition of intense heat and poor roads, the weights should never exceed 800 pounds per bull cart and 2,000 pounds per army escort wagon.

By regimental administration the pack animals and light pony transportation followed the firing line with reserve ammunition and three days' travel rations.

The division wagon train was formed at daylight at La Loma Church March 25th, and at 8 o'clock moved out on the Novaliches Road, under the personal command of the division quartermaster; a detail of twenty troopers, under Lieutenant Boyd, of the Fourth Cavalry, was escort. The



THE CARABOA WITH LOAD.



GOING INTO RIVER.

verbal orders of the major general, commanding the division, were for me to keep the head of the column as close to the advancing firing line as was safe. The order of the train was as follows: Escort wagons with ammunition, the artillery wagons in advance, followed by the bull carts and pony transportation, that of each organization being kept together. Right of way was given to the Signal Corps wagons laying the telegraph line and the hospital ambulances, which formed no part of the train. A party of the Engineer Corps went in advance, repairing the road, which about three miles from La Loma became very bad. The train was parked at 9 P. M. in the Tuliajan defile on the east side of the river; distance traveled, six miles; casualties, one mule slightly wounded on an artillery escort wagon at Talipapa.

On March 26th, at 3 A. M., engineers under the direction of Major W. A. Shunk, U. S. Volunteers, with relief details of fifty men, began cutting approaches and building crossing at Tuliajan River, and at 12 M. the train succeeded in crossing and moved on to Melinta, which was reached about 3 P. M., meeting General Wheaton's brigade at that point. The train advanced about a mile on the road to Polo and went into park, about one and one-half miles in rear of the firing line. The distance marched was six miles; the roads excellent. The escort for this day and the rest of the advance to Malolos consisted of three troops of the Fourth Cavalry under command of Major L. H. Rucker, Fourth Cavalry.

March 27th, the wagon train broke park at daylight and advanced to Macauayan, where it was halted for several hours. Then it moved on to the Marilao River and went into park after the battle in the evening. The distance traveled was seven miles; the road excellent. As the train was being brought up to park, the enemy resumed fighting and the wagons were halted under an indirect, long range fire to allow the First Montana Regiment to pass; this regiment at this point lost five or six men, but the train escaped without serious casualty. It was noted that here as well as other times, the Chinese bull cart drivers were unconcerned under fire.

During the nights of the 27th and 28th, the engineers under Major Shunk built a casco pontoon bridge across the Marilao River, and in the morning of the 28th the artillery mules, ambulances and seventeen escort wagons and five bull carts crossed the bridge, when the main casco filled and sank, breaking the bridge. The railroad bridge was then floored with planking, brought up on the train, the railroad having been repaired to this point, and the rest of the wagon train crossed by 5 P. M. The entire train was parked in the plaza in front of the church. At 6 o'clock A. M., the wagon train moved out with a battalion of the Third Infantry as a rear guard. At the Bocaue River three-fifths miles north of Marilao the wagon bridge was found destroyed and it was necessary to build an approach to, and floor the railroad bridge. The wagon train crossed the Bocaue bridge early in the evening. The Bigaa River railroad bridge superficially damaged by the enemy, had been repaired during the night and the wagon train was ordered unloaded and left in charge of Major Rucker and the cavalry escort; all the supplies were loaded on a railroad train, and this service was maintained to Malolos. The supplies reached the army at Guiguinto at 10 A. M. on the 30th, and in the evening the train was advanced to the thirty-third kilometre post, where the army bivouacked.

On the 31st the army assaulted and took Malolos about 10 A. M., and immediately the train was brought up, the enemy having been forced back so rapidly that the railroad from Bigaa to Malolos was uninjured. Major Rucker was directed to bring up the wagon train, which arrived in Malolos in good condition April 2d.

From March 31st to April 25th, the division occupied Malolos and the wagon transportation was thoroughly overhauled and repaired. The railroad on April 22d was running two trains daily between Manila and Malolos, transporting vegetables, forage, ordnance, mails, supplies and daily issues of bread, meat, condensed water and "zacate," or grass for native ponies, not only to the troops guarding the railroad, but also those occupying Malolos. Second Lieutenant Gardenhire, First Montana Regiment, was de-

tailed to distribute supplies along the road, take command of the train guards, and superintend the loading of supplies for Malolos; and this duty he performed efficiently and with a conscientious regard to detail.

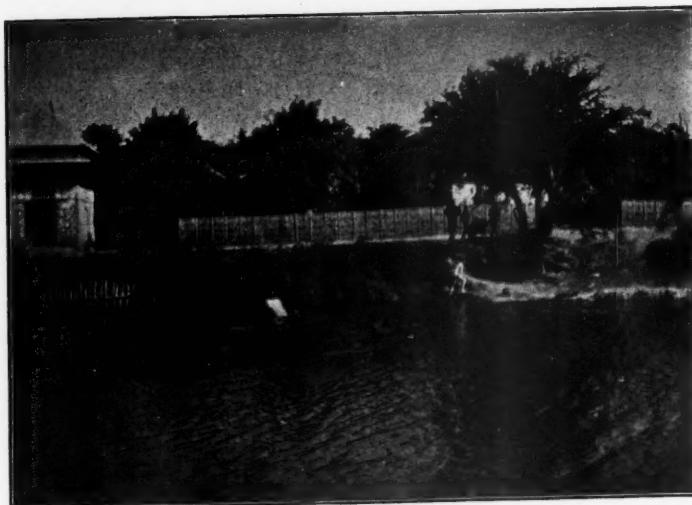
By direction of the division commander the quartermaster purchased fuel for the troops, and where possible, grass for the horses; contracted for the lighting of the city at night, and employed native labor for the loading and unloading of trains, storing supplies and other necessary labor, for which, had details of our soldiers been used they would have suffered by reason of the intense heat.

On April 14th, the Tenth Pennsylvania Regiment was relieved by the Fifty-first Iowa, the latter regiment receiving all the Pennsylvania transportation, and in addition nine bull carts and bulls. On April 23d the city of Malolos was abandoned and all wagon transportation parked at the railroad station, one of the railroad storehouses used to store Q. M. supplies and ammunition. Major Kobbe's command of the Third Artillery was entrusted with the guarding of the station and supplies.

On the 25th the Bag Bag River, three and one-half miles north, was passed by the army. Railroad communication with the division was maintained to the Bag Bag River. The bridge over this river was seriously disabled, one bay having had its steel girders cut, dropping it in the river. The wagon transportation was brought up from Malolos April 26th.

During the period from April 27th to May 4th the engineers repaired the railroad bridge at Bag Bag and constructed a bamboo raft ferry across the Rio Grande at Calumpit, and by 4 o'clock A. M. May the 4th, the entire wagon train had crossed the Rio Grande and was stretched out on the road in Apalit, ready to advance. Meanwhile the railroad service which obtained at Malolos was maintained with the terminus at Bag Bag. The division began its forward movement at daylight, followed by the wagon train at 6:30 A. M.

At 11 o'clock A. M. the wagons were parked on the north side of the Barrio of Sta Maria. The road between Sta Maria



SWIMMING WITH PACK.



THE LANDING.

and Sto Tomas for about two and one-half miles is very heavy. Two bridges crossing Esteros were totally destroyed by the enemy, and the road at one point was rendered temporarily impassable by pitfalls. Here the engineers, under command of Lieutenant W. P. Wooten, corps of engineers, did yeomen's service, building the bridges and repairing the road. In the meantime ammunition and supplies were ferried across the Esteros in small dugouts and carried by the men and pack horses to their organizations on the firing line.

May 5th the division advanced to San Fernando, and in the evening of the same date, the wagon train under command of the division quartermaster returned to Bag Bag for supplies, starting to return the evening of the 6th. The bridges were completed by the engineers on the morning of the 7th, so that the supply train reached San Fernando about 10 A. M. of that date.

The wagon train had now wholly to be relied upon for supplies until such time as the railroad could be repaired. The intense heat requiring that all marching be done at night, three trips were made to the Bag Bag and return, all wheeled vehicles of the command being pressed into service.

The march to the Bag Bag was done in the first night, the loading and return ferrying by day, and the return march the second night, making forty hours of continuous labor. The round trip was twenty-eight miles and the roads heavy, especially through the swamps, and the ferrying across the Rio Grande was very hard work, and told heavily upon the men and transportation.

Two freight cars were found at San Fernando which had been burned by the enemy, but whose running gear was uninjured. These were fitted up, propelled by Chinese coolies, and a daily service with a capacity of 60,000 pounds of supplies was inaugurated May 17th, bringing up much needed fresh meat and vegetables to the troops. The engineers had repaired the Sto Tomas railroad bridge destroyed by the enemy, with about 100 yards of track. The wagon train service was discontinued. The railroad repair party

completed its labors on the Bag Bag bridge, track and Rio Grande bridge at Calumpit on May 22d, and on May 23d one train daily was run to and from Manila.

The transport of offensive military operations in Luzon in the rainy season received considerable thought and investigation on my part.

The condition of the roads during the rainy season eliminates the possibility of using wheeled vehicles. The repairing of the existing railroads and building new ones consumes too much time, and restricts the theatre of operations too much, as also does the sole dependence on river and lake transportation. There is left to consider then: 1st, Coolie or native bearers; 2d, pack animals; and 3d, carts or sledges drawn on runners.

A mule pack train, I believe to be impracticable for these cardinal reasons:

1st. Scarcity of mules; the difficulty, expense and time necessary to secure them in the Philippines.

2d. The amount of forage to be carried on the train for the subsistence of the mules, and the fact that this forage must be imported.

3d. The inability of mules to cross swamps and rivers, and the fact that when a mule is once mired or submerged, he gives up and no longer tries to extricate himself.

A buffalo pack train I believe to be practicable and efficient for the following reasons:

1st. The water buffalo is almost amphibious. (I had one submerged for over a minute, trying to swim with a too heavy load of ammunition across a river, and he came out ultimately with his load.)

2d. Capacity. He can carry a load of from 250 pounds to 400 pounds freely, and march twelve miles a day with it.

3d. Forage. No forage to be carried; the bull can live on the country.

4th. Supply. Bulls disabled or sick can always be substituted by fresh ones seized or requisitioned for in the field.

5th. Rivers and marshes are no obstruction to his progress, and are impassable for wagons or pack mules. I made a buffalo cross a river fifty yards wide, thirty yards swim-

ming, with a load of 284 pounds on his back; the animal took it as a matter of course, swam freely and easily, and climbed up a steep bank on the other side with his load.

6th. Training unnecessary. I have packed five bulls with loads without trouble, and two of the bulls were green ones picked up during our advance.

*7th. Economy. The buffalo costs twenty dollars, or thirty dollars Mexican currency, in the country, and can always be obtained. A mule costs, including transportation from the United States and six months imported forage, at least \$1,000 gold.

The aparejo set up with bamboo or rattan and rice straw fits a buffalo as if made for him, the cinch straps and rigging only have to lengthened because of his girth.

For 100 bulls are necessary ten experienced packers, thirty assistants (soldiers), 100 natives to lead the bulls and secure food for them, and 100 complete pack outfits. Allowing 300 pound loads, a regiment of 1,000 men need 200 bulls to carry ten days' rations and 200 rounds reserve ammunition per man, for men and officers. To each 100 pack bulls I would add ten bulls and drivers and ten eighteen-foot bancas, to be drawn as sledges, used as such, and for purposes of ferriage. A train of 400 pack bulls would enable a column of 2,000 men to make a raid of 100 miles undelayed by destroyed bridges or marshy country.

These photographs, taken by Mr. Frederick Palmer, war correspondent, tell convincingly the success of the experiment cited above, of swimming a loaded buffalo. No. 1 shows the load, three cases of hard bread packed in tin, weighing 284 pounds, tied on the American pack saddle with a diamond hitch. No. 2 shows the buffalo, packed for the first time, entering the river "as a matter of course." No. 3, the swimming. No. 4, the landing.

* Estimate made in July, 1899.

A MILITARY PROBLEM, AND A SOLUTION FOR IT.

BY CAPTAIN JOHN H. PARKER, TWENTY-EIGHTH U. S. INFANTRY.

WHEN the infantry firing line shall have worked its way through the jungle or the chaparral or the swamp or over the level ground to within striking distance in the great battle to be fought in our next war, the men will have expended about all of their ammunition by the time they reach the works of the enemy and make their lodgement. Then we shall be met by the old, old problem of how to supply that line quickly with more ammunition. It is a problem as old as the bow and arrow, probably older. When the first two men engaged in their first fight, one of them threw stones and the other used a club. The club broke, or the stones were all thrown, and the fellow who got out of ammunition was beaten. There were plenty of stones near by—but not within reach; there were plenty of clubs in the woods, but not within reach; and so the fellow who was out of ammunition was licked, as he has been ever since.

We were confronted with the same problem at Santiago; and we got our new supply because the ground happened to be such that there was a high hill between the depots in rear and the enemy. The pack trains could and did come up behind that hill right to the firing line with the loads of stuff more precious than even bacon and hard-tack; and so we never got out of ammunition. Our stones held out, and we licked the other fellow. But we cannot expect such a favorable lay of the battlefield in the general case; and it may be presumed that our next antagonist will be a better strategist than the Dons were at Santiago.

So it behooves us, if we are wise, to make adequate plans in advance to supply the clubs or stones for the fighting

men who are to uphold our end of the controversy, when it comes to blows. We must take stock of what we have, what we shall require, and how we shall meet the necessities of the conditions expected.

These conditions will be a danger zone of 2,000 yards or more, relentlessly swept by a hail of musket and machine gun bullets, and ploughed by shrapnel; a firing line clinging to the inequalities of the ground for shelter, while it worms its way inch by inch in the direction of an almost invisible but stinging foe; dead and wounded men scattered about from the beginning of the danger zone to the firing line, waiting for succor until night may permit it to seek them; men on the firing line with their tongues hanging out for thirst, their belts nearly empty, eyes fixed with desperate glare on the intrenchments in front, praying for "more cartridges," and for a chance to see a target, to get in arm's reach of the foe. From somewhere in front comes a remorseless hail of shrapnel, while overhead the hissing flight of harmless projectiles makes the men aware that our own artillery, from some place behind the line, is returning the compliments of the enemy in kind. There are no men in the line who want to go back, for it is less dangerous to lie still; and there are none who can be spared to go to the rear, for there are gaps here and there in the line that cannot be closed, where bullets have found their billets in brave breasts.

Now the word goes down the line, "Such a battalion is out of ammunition." Captains take stock and find what they can spare, and it is passed down from hand to hand. A few men are detailed to try to cross that horrid danger zone and bring up what little ammunition they can carry in their haversacks. Theoretically, here we should overwhelm the enemy with rapid fire, and then charge with an enthusiastic yell headlong into his works; practically, we find that we are hard pressed to hold our ground, for somehow our fire has not caused his to slacken, and we have lost many. Besides, we now find that our ammunition is running low and must be husbanded just as we ought, theoretically, to use magazine fire as rapidly as possible.

We are now fairly confronted with the greatest problem of the battlefield. How are we to get that overwhelming preponderance of rifle fire which we must have at this stage of the battle? Where are we to get the ammunition? How shall it be brought forward?

We have not in our service any known system devised to meet this emergency. We have no ammunition cart adopted; our only reliance is that the accidental inequalities of the battlefield may permit the pack trains to come up, or to send a few men back to carry up ammunition by the haversackful, or to send a new firing line up bodily to reinforce the old one. The pack train will not be able to come up, in the general case; the few men who can be sent to the rear stand a good chance of being killed in getting there, and a better chance of being killed as they come back with their burden; and if we send a new firing line forward their losses will be probably even greater than those of the first line, for now the enemy is shooting low, and every bullet makes a line of danger for two thousand yards to the rear.

Even if we get enough men up we only thicken our line, thus making a better target for the enemy. The losses are out of all proportion to the increase of fire thus obtained.

Here we need a device which will enable a few men to bring forward over this danger zone by hand, a liberal quantity of ammunition, and a few of those nasty little wasps of machine guns which can vomit each a fire equal to that of 114 sharpshooters, and which, firing from a rest, with the effect of a hose sprinkling water, without nerves or fatigue, will furnish exactly the increase of destructive fire required by the conditions described. Is it not clear? Does it take a military expert to see this? Cannot any man with common sense see that this is the solution of the problem?

A Colt Automatic weighs forty-one pounds, and fires 500 times per minute, with whatever accuracy a garden hose can be pointed. You can *see* the effects as you point it at whatever target may be presented. It sweeps along the trench of the enemy in front of you and simply wipes away his exposed men, just as you wipe out the marks on a slate with a sponge.

A Gatling gun weighs 225 pounds, and you can do exactly the same thing with it. It never jams or gets out of order. It requires only a few men to work it, and can be hidden behind a clump of grass. Either of them is good; proved on the battlefield at Santiago, up to 2,600 yards, and is much more accurate than the fire of an equivalent number of soldiers.

To put it in action, however, and to keep it in action, you have exactly the same problem stated above. You must get it up, and get up the ammunition to feed it. If you can get the gun up you can get the ammunition up; if you can get the ammunition up you can get the gun up; whatever device will enable you to do the one will enable you to do the other just as easily. It is only a question of some simple little device by which a few men—three or four—can trundle forward a weight of a thousand pounds or so. If the ground is fairly level they will have to do it by hand, for animals will be shot down. If the ground is broken so badly they cannot trundle it forward by hand there will be considerable cover, and in that case a single mule can be hitched to the cart and can be urged forward to a point near to or on the firing line.

If a few men can handle a thousand pounds or so, they can supply all the ammunition required. A thousand rounds weighs only sixty-eight pounds. Ten thousand rounds weighs 680 pounds, and will furnish fifty rounds apiece for 200 men. Ten thousand rounds is enough to keep a Gatling gun going continuously fourteen minutes, or a Colt Automatic twenty minutes. Half a dozen such guns, going continuously and with devilish precision, can silence a line of the enemy a mile long in eight minutes. It was tried at Santiago, and they did it. There was other fire helping, but this was the decisive factor at the critical moment under discussion.

This is the solution, then. Required a light cart, capable of being moved by draft, by pack mule, or by hand by three or four men; capable of mounting a Colt Automatic or a Gatling gun, and of carrying a weight of twelve or fifteen

hundred pounds. Given this cart, and then men with the nerve to handle it, and the problem is solved.

It is already solved. We have such a combined machine gun carriage and ammunition cart, capable of doing all this, and of being changed from pack to gun mount on wheels in only two minutes and two seconds, without tools. It has been made within the last six months, and is now ready for its final tests; invented by an officer of the army who had experience on the lines indicated, and who knew just what he wanted. He says it meets all requirements.

Then we now have the problem of organizing this service so as to get the maximum use out of it at the least expense. When the organization shall have been settled, and a sufficient number of carts made, we can rest assured that the line will not get stuck in battle for want of ammunition or accurate fire.

To bring about this organization will require intelligent interest on the part of the service. It is claimed that the right proportion of carts is one to each battalion of infantry and to each squadron of cavalry. It is further claimed that the guns should be organized, not allowed to drift around the battlefield without a leader or a responsible head. The proposition is to organize the complement of each brigade into a detachment for the service of that brigade. This will make nine guns and nine carts in each brigade. It is claimed that the service of a battalion with ammunition and machine gun requires an officer with each gun and cart; and also that there ought to be one officer in each brigade to have supervision of the whole service in that brigade. Over all, to organize and set the new service going, one officer of experience ought to be set to be chief of the new corps of machine guns and ammunition carts.

The present status of the matter is that such a cart, which is confidently expected to meet all the above requirements, has been designed and built and is awaiting trial. Subject to the results of that trial, about which no doubts are entertained, as the cart is the result of most careful study, of most careful planning, of extended experience, and of expert construction, it is hoped to bring about an interest in the sub-

ject which will lead to a concentrated effort for the adoption of some system of organization for its use. It may not be the above system; it may be entirely different; but any sort of system which prepares to meet the emergency by adequate preparation will be better than the present conditions, which are no improvement over those of 1898 in this particular.

THE NATIONAL GUARD.

BY BRIGADIER JAMES RUSH LINCOLN,* IOWA NATIONAL GUARD.

NOW that the "Dick bill" has become the law under which the National Guard is to be reorganized, it becomes necessary to consider the weaknesses of the Guard and how it is to be strengthened and made in fact the first reserve of the regular army.

The first point for consideration is: How best can the Guard be recruited to make it a body of soldiers physically able to bear the strain that will come to it in war?

At present recruits, in many States, are examined by local physicians at their home stations, and too often, from ignorance of the needs of a soldier, the examination is very superficial, and in fact candidates are too often passed from a feeling of sympathy, or a reluctance to endanger the surgeon's own business by turning down an influential party. So we will at times find that these examinations are mere pretences and serve no good purpose whatever.

There seems to be only one way to cure this evil, and that is to have a U. S. surgeon accompany the inspector in his annual tour of inspection and examine all who have not had an examination by a U. S. surgeon; the local surgeon's examination enabling the recruit to be enrolled in the State service, but not eligible for service under the U. S. government until examined and passed by a regular surgeon.

Having secured the recruit, it should be clearly understood by him that he is to serve for the full term of his enlistment, and not, as is the case in most Guard organizations, receive his discharge whenever he sees fit to ask for it. Captains fear antagonizing home people, and so recommend discharges for all who ask for them.

*A veteran of thirty-three years' service with volunteers and guardsmen.

If a discharge is wanted before expiration of term of enlistment, let the soldier apply for it by making a sworn statement of the reasons for asking for a discharge, and the discharge granted only when the regimental commander approves such request, after a careful investigation of the case and finding that great harm will come to the soldier by his retention in the service.

It might, perhaps, be desirable that discharges should be given after one year's service, in a three years' enlistment, upon the payment of \$50.00; after two years' service, upon the payment of \$20.00.

Again: Holding companies up to their minimum number of enlisted men is a serious problem, and companies should be received into the Guard that can, when needed, render real service with full ranks, and not have paper companies drawing money and supplies without the ability of rendering any efficient service in return. The equipment of the Guard needs no discussion, as the general government provides for them the same as for the regular establishment.

Discipline, strict and impartial, is the most vital requirement the government should demand before accepting the Guard of any State. The great lack of a proper discipline is the real weakness of the Guard, and unless it can be cured, better not rely upon them, for only disappointment will come in the hour of need. The recruit should understand, before enlistment, just what will be required of him, and then made to live up to these conditions, or given at once a dishonorable discharge.

A command not able to assemble seventy-five per cent. of its strength for any service, and every drill, is unreliable and should not be maintained. A company that considers a tour of camp duty a picnic should remain at home and picnic with their lady friends as civilians.

When in service, soldiers failing to obey camp regulations, and to conduct themselves in a soldierly manner, should be dishonorably discharged at once and returned to their homes in advance of their companies. In a word, the discipline of the Guard must be more severe than in the regular army, because officers have so short a time in which

to mould into obedient soldiers men who are under authority only for limited periods of time. National Guardsmen must be obedient, self-respecting soldiers or cease to wear the uniform they fail to honor.

Drill comes next, and should be of such a character as to make the soldier available for any duty. He should be so instructed as to be maneuvered under all conditions without confusion and danger of disorganization, and to reach this degree of efficiency should be drilled in close and extended order alike, with the most painstaking care, and not marched around the armory in column of fours, executing fours right and left occasionally, and counting this as instruction in preparation for actual service. He should be able to shoot so as to hit the object fired at a reasonable percentage of times. He should be able to take his post as a sentinel, on the camp guard or on the outpost, and be able to perform his duty intelligently. A command may execute a faultless guard mount and yet be unfit to perform sentinel duty. We can omit the guard mount, but cannot give up efficient sentinel work. Companies at their home stations now waste too much valuable time practicing guard mount and neglect the individual instruction in guard duty. Guard mount is a beautiful, useful and necessary ceremony, but general guard duty should be learned first.

Some regiments in their camps practice the ceremony of review. This is waste time, for officers properly informed know how to execute this ceremony without rehearsals. Better use time on the drill ground in lines more necessary for the practical soldier. In fact, all ceremonies can be well executed by well drilled soldiers without special practice, but all troops that shine in ceremonies are not efficient bodies of soldiers for field maneuvers.

In a word, have well drilled commands as real soldiers first, as display organizations next; leave rehearsals to wedding parties, who think more of the display of the function than of the union that must bring happiness or woe. The care of the men is of the greatest importance, and from the circumstances existing with Guard organization not fully appreciated; for, select your recruits with ever so much

care, discipline them ever so rigidly, and drill them ever so thoroughly, they will still be unsatisfactory for service unless officers know how to take care of them.

Commanding officers should understand that no detail is too insignificant to be looked after, and should study their men, study the conditions of the service engaged in, and study how to handle these men under existing circumstances so as to be able to keep them on duty in the field and out of the hospital.

Every company commander should know how to care for and to cook the ration given for the subsistence of his men. He should know the habits of his men, and should guard them from abuse, and compel a proper observance of restrictions necessary for their personal welfare.

The selection of camping grounds should be a study for officers of all grades, and men should not be required to camp upon unhealthful sites when possible to be avoided. How often are camps on flat, undrainable fields, and the men made to wade in mud and water on fatigue duty, to pick up scraps of paper and pieces of wood and like rubbish, regardless of the greater risk coming to them from wet feet. Proper camps can be readily policed without unnecessary exposure, and as a rule, can be just as easily found, and such only should be occupied. Some officers will demand a spotless camp as to surface conditions, and the removal of every unsightly object, however harmless, but fail to note that wet feet obtained under such conditions, do more harm than scraps of paper.

Every camp should be clean and free from litter of every kind, but officers should consider all the requirements for a healthful camp, and not be sticklers over some little non-essential; that is, care for the men in all directions, and not only on a few visible lines. Do the men of a company, whose street is always properly cleaned, always have clothes and bedding in the best possible conditions; have shoes water tight, and extra socks for emergencies?

It is too true that oftentimes the martinet on police duty is a failure when coming to the cooking of food and the care of the persons of his men. We need broad men, who can see

hard, half-cooked beans on the mess table, as well as paper on the parade ground, and will require the removal of both. Let the men see that their officers watch over them to maintain their health and they will heartily aid them; but let them find that their officers require extra care along all visible lines when the commanding officer is to visit them, and they will neglect to properly perform their duty unless driven to it.

The Guard has been placed where it desired to be, and must now prove itself able to fill the place given it. Let the government demand soldierly organizations and then give proper support, for the regular must be able to respect the Guardsman or no good end will be reached by the reorganization.

Under prevailing conditions, infantry will be the most efficient arm for service in the Guard, as it can be best maintained in a vigorous condition. Owing to the impossibility of furnishing horses for the cavalry and artillery, and ground of sufficient extent to permit of the proper handling of their arms, it will be unwise to attempt to maintain organizations of this kind.

Artillery has become so scientific, and makes use of such varied machinery in the coast defense, as to demand the whole time and study of officers to meet the demands made upon them. Cavalry must be composed of men who can fight on horseback; who are riders and able to care for horses properly in the field, or are horsemen in the widest meaning of the term.

Mounted infantry cannot perform cavalry duty, for they are no more cavalry because they are transported on horseback than an officer is a skilled soldier because he wears shoulder straps. The training given infantry, when properly instructed, unfits them for the duty a cavalryman is called upon to perform. A cavalry commander who is always studying cover will not be the leader to turn a defeat into a rout when victory comes to him, or in defeat to so strike an attacking foe as to cover the withdrawal of his comrades of the other arms, and enable them to retire from the field in such condition as to avoid complete overthrow. Caution at

a critical moment is of as much value in the handling of cavalry as oil would be in extinguishing fire.

The modern battlefield, with its rapid fire and small caliber firearms, is certainly destined to give the real cavalry leader many opportunities for brilliant work, for man has the same nature as of old, and moments will come when loss of vigor, exhaustion, or failure in ammunition supply, will give the true cavalryman the chance for the white weapon once again to sweep the battlefield with its mad rush and win a victory that will be more than a defeat to the foe. But the training to prepare for the accomplishment of such feats is impossible for the Guardsman, and he must be content to serve where he can have a chance to render distinguished service.

Infantry under National Guard conditions can prepare themselves to perform any duty assigned to them, and by diligent practice on the target range, that each company can maintain, fit themselves to so shoot as to make the crack of their rifles the sure signal of victory.

To repeat, the National Guard should recognize its strong points and its limitations as well, and should enter the field only in which they can excel; must be willing to surrender their individuality as citizens, and as soldiers willingly submit to a rigid discipline and fulfill the demands made upon them by duty and patriotism; must take pride in their profession and cease to look upon its service as an amusement, and recognize it as a stern duty, giving pleasure only with excellence attained; must expect support and respect from their fellow-citizens only when they cease to be citizens when on duty, and become real defenders of their country and its flag.

With such a National Guard our country will be stronger and our brothers of the army will respect and trust the Guardsman, and our nation be prepared to meet any complication that may come to it.

THE BATTLE OF EL CANEY.

BY CAPTAIN JAMES A. MOSS, ADJUTANT TWENTY-FOURTH INFANTRY.*

AT 5:30 A. M. July 1st, the Twenty-fifth Infantry started for a point near the Ducureau mansion, a relic of grandeur, and the object designated as the pivot of operations on the right of the American line.

At 9 o'clock we reached our destination, a mango grove, a mile or so from El Caney, a village occupied by about six hundred Spanish soldiers. We were held in reserve, and a detachment sent under Lieutenant Lyon to reconnoiter in the direction of a heavy, continuous fire. As we were taking cat-naps, nibbling at our rations and chatting, the musketry fire could be heard as plainly as our own words, but on account of the high weeds, underbrush and trees, we could see nothing, although some of the officers climbed into trees and used their field glasses with diligence. The intensity of the firing varied considerably, and the many volleys fired were almost perfect—indeed, so much so, that we all thought they were fired as only United States Regulars can fire volleys, and *must* be American volleys. So, every time one was delivered, we would wish from the very bottom of our hearts and souls that more men had been killed or wounded. Not many hours later, however, we learned, to our grief and sorrow, that they were Spanish and not American volleys.

About noon orders were received to strip for action, and leaving a guard of eight recruits in charge of the blanket rolls and haversacks, the regiment started to advance. Two hundred yards takes them to the main El Caney-Santiago Road. Turning to the right they follow this road half a mile

* From "Memories of the Campaign of Santiago," by James A. Moss, First Lieutenant Twenty-fourth Infantry. San Francisco, 1899.

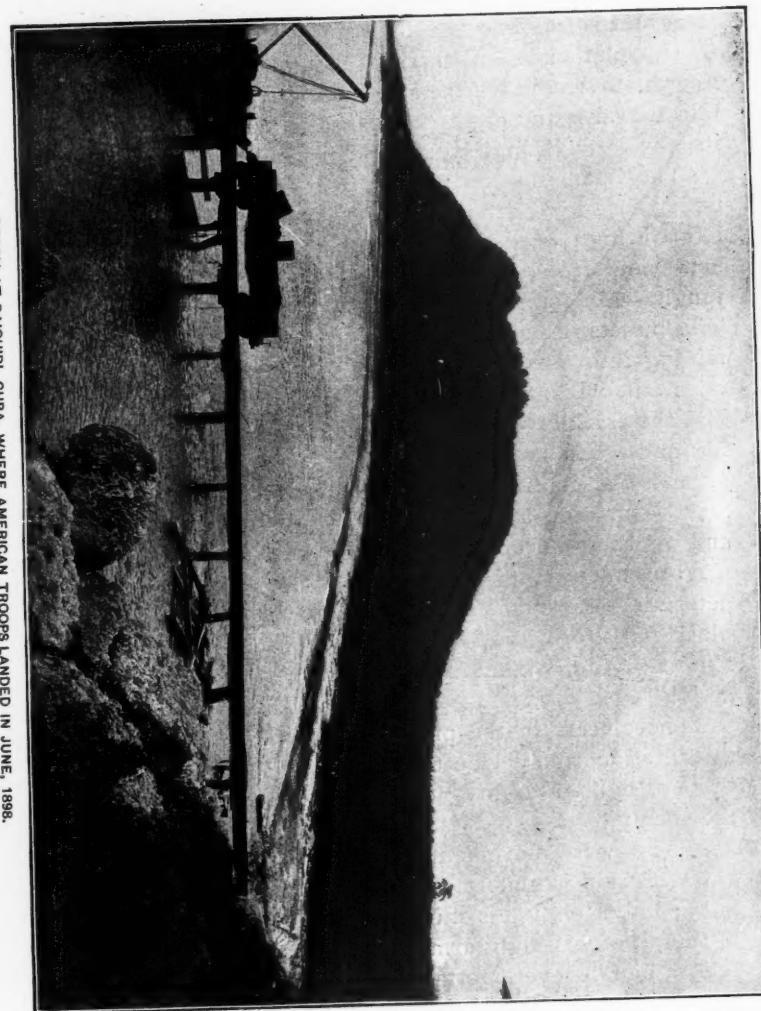
or so, and making another turn in the same direction, the command enters a by-road. Here they halt. A Spanish sharpshooter, stationed in the top of a cocoanut tree, has just seen the column, and is making things interesting for some of them; bullets from El Caney are beginning to whiz overhead. Word is passed, "Lie low, men!"

The dead, dying and wounded are being taken past to the rear. The wounded and their attendants are telling the Twenty-fifth: "Give them hell, boys; they've been doing us dirt all morning." A member of the Second Massachusetts, carrying several canteens, and going to the rear for water, says to our soldiers: "The buggers are hidden behind rocks, in weeds and in underbrush, and we just simply can't locate them; they are shooting our men all to pieces."

The procession is, indeed, terrible! Men with arms in slings; men with bandaged legs and bloody faces; men stripped to the waist, with a crimson bandage around the chest or shoulder; men staggering along unaided; men in litters—some groaning, some silent, with hats or blood-stained handkerchiefs over their faces; some dead, some dying! It all seems like a dream—a terrible dream!

"Forward, march," comes the command. The regiment advances a few hundred yards and halts. Two companies, (G, Lieutenants McCorkle and Moss, and H, Lieutenant Caldwell) are at once ordered to form the firing line, the position of which is about 800 yards from and facing a stone fort on a high, commanding hill, almost in the town of El Caney. The other two companies of the battalion (Captain Scott's) are in support, and the rest of the regiment is in reserve. The Twenty-fifth's left connects with the Fourth's right.

"Forward, guide left, march," is given, and advancing two hundred yards through a grass field, hidden from the enemy's view by a double row of trees, they reach a barbed wire fence. Some of the soldiers are supplied with wire cutters; the command at once cuts its way through, and crossing a lane, enters an open pineapple patch. Ye gods! it is raining lead! The line recoils like a mighty serpent, and then, in confusion, advances again. The Spaniards now see them and are pouring a most murderous fire into their



BEACH AT DAIQUIRI, CUBA, WHERE AMERICAN TROOPS LANDED IN JUNE, 1898.

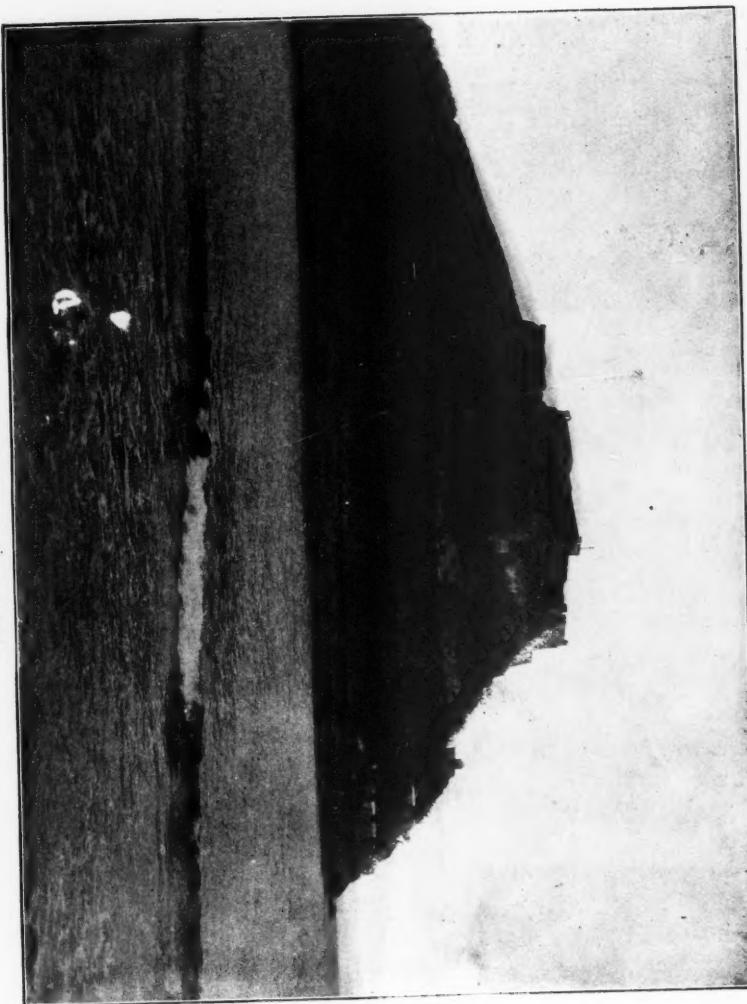
ranks. Men are dropping everywhere. C Company (Lieutenant Murdock) is rushing up to reinforce the line. The bullets are cutting the pineapples under our very feet—the slaughter is awful!

One platoon of E Company (Lieutenant Kinnison) is running up to strengthen the left of the line. D Company (Captain Edwards and Lieutenant Hunt) is on the right, working its way through high weeds and jungle underbrush.

The Spaniards are using smokeless powder, and being under cover, we cannot locate them. A few yards to our left are high weeds, a few paces to the right thick underbrush and trees, a short distance to the front a veritable jungle—all, for more than we know, alive with Spaniards. The bullets, missives of death from sources unknown, are raining into our faces. A soldier comes running up and cries out, "Lieutenant, we're shooting into our own men!" Mid the crackling of rifles, the whizzing of bullets, the killing and wounding of men, and the orders of the officers, great is the confusion! How helpless, oh, how helpless we feel! Our men are being shot down under our very feet, and we, their officers, can do nothing for them. It seems as if fate is about to turn against us. The faithful darkies, with determination and devotion stamped in every line of their black faces, are looking appealingly to their white officers, almost saying, "Lieutenant, jes tell me wat ter do, an' ah'll do it!"

The officers in the pineapple patch are now holding a consultation, and decide there is but one thing for United States Regulars to do—advance! Advance until they find the enemy.

The onward movement is just about to start. Lieutenant McCorkle is under a small cherry tree, kneeling on one knee; unbuttoning his shirt, he lowers his head and beholds in the pit of his right arm a ghastly wound, and then, poor fellow, he falls over, mortally wounded. A man on his right exclaims, "Ugh!" and dropping his rifle, falls dead. Another just in front cries out, "I'm shot!" Bullets are dropping like hail! One officer and two privates make two attempts to carry their wounded commander's body to a place



MORRO CASTLE, SANTIAGO DE CUBA.

of shelter, but both times they are driven back by Spanish bullets; a third effort, however, is successful.

McCorkle is dead! Moss takes command of the company. A rush of fifty yards takes them to a place of comparative shelter; here they rest a while.

Lieutenant Murdock is wounded, and Lieutenant Moss takes command of his company also; another rush over exposed ground, and C and G Companies find shelter in a small stream.

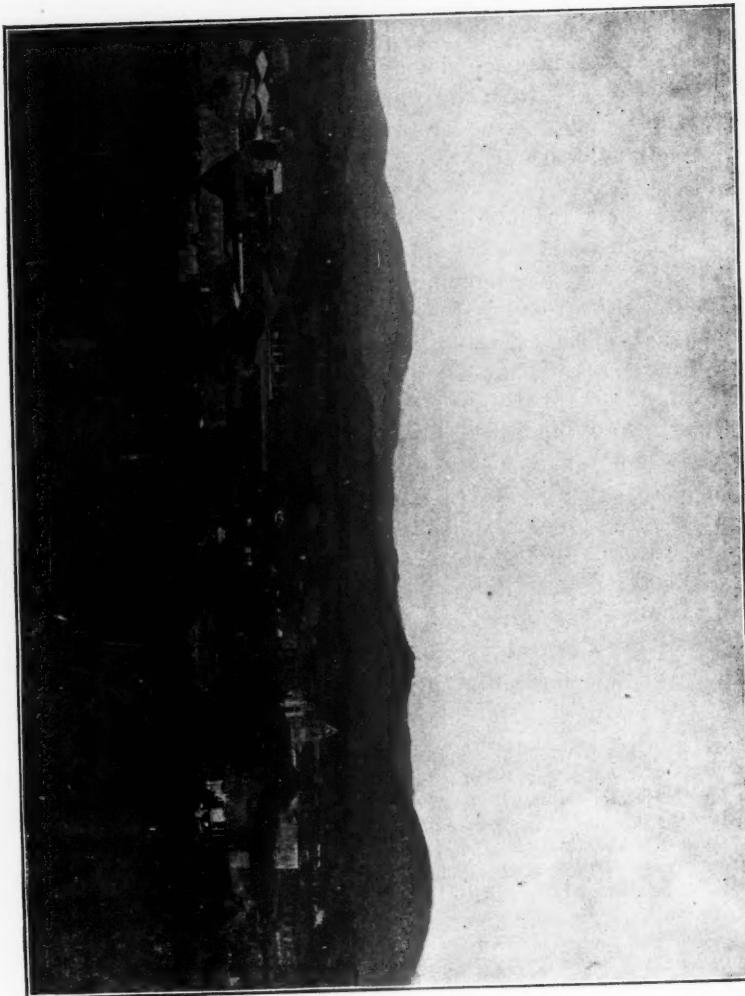
Lieutenants Caldwell and Kinnison have been gradually working their way up another stream, and are now about two hundred yards from the fort, and for the first time since the firing line was formed do our men see the Spaniards.

Zip, zip, zip! The air is filled with bullets! Captain Edwards drops, wounded through the right groin, and Lieutenant Hunt takes command of the company.

"Now, men, altogether!" and a dash of forty yards takes C and G Companies to the crest of a small hill, where they join Lieutenants Caldwell and Kinnison.

Lieutenant Hunt's company is firing over the crest of a hillock fifty yards to the front and right.

Our firing line is now no more than one hundred and fifty yards from the fort, and our men are doing grand work. A general fusilading for a few minutes, and then orders are given for no one but marksmen and sharpshooters to fire. Thirty or forty of these dead-shots are pouring lead into every rifle-pit, door, window and porthole in sight. The earth, brick and mortar are fairly flying! The Spaniards are shaken and demoralized; bare-headed and without rifles, they are frantically running from their rifle-pits to the fort, and from the fort to the rifle-pits. Our men are shooting them down like dogs. A young officer is running up and down, back of the firing line, and waving his hat above his head, is exclaiming to the men in the rear: "Come on, come on, men; we've got 'em on the run!" "Remember the *Maine*!" shouts a sergeant. "Give them hell, men!" cries out an officer. "There's another!" shouts a soldier; bang, bang, bang! and another Spaniard drops. Four are shot down in the door of the fort.



EL CANEY, CUBA.

A Spaniard appears in the door of the fort and presents to the Twenty-fifth a white flag, but is shot down before the firing line can be controlled. Another takes up the flag, and he, too, falls.

The fort has been silenced. However, a galling flank fire is now coming from the village and a small block-house on our left. As long as we remain in our present position we can accomplish but little, as the walls of the block-house are impervious to our bullets. It is therefore decided to rush forward and change direction to the left, thus gaining a position facing and slightly above the block-house.

The line is now being formed for the final rush; all is ready—they're off. One company of the Twelfth Infantry, which has been working its way up on the right is also rushing up. Lieutenant Kinnison is wounded and taken off the field. Men are still dropping by the wayside, but on, on, up, up, they go, those dusky boys in blue.

The line is now occupying its new position; some of our men are shooting into the town and others are shooting down through the roof of the blockhouse; the Spaniards are falling over one another to get out. The heavy firing has ceased, and after twenty-five or thirty minutes of desultory firing, El Caney itself surrenders. Where but a moment ago floated the Spanish flag now flutters the stars and stripes!

And thus it was that at El Caney, "The Hornet's Nest," our colored regulars fought and won.*

*An inspection of the captured fort could but cause one to soliloquize with General Sherman, "War is hell." The rifle pits were open graves, while the interior of the fort, with its walls, floor and ceiling bespattered with human blood, was a real "Chamber of Horrors." One of the rifle pits presented a scene which baffles description—a scene as ineffaceable as the image of death, for it was, indeed, death itself in a most horrible form. At one end of the pit lay a dead Spaniard in a sitting position, his back resting against the end of the pit, his knees raised, the legs being drawn toward the body, his hands flabbily resting by his sides, his head slightly thrown back, exposing to view the white of his eyes, and his partially opened mouth showing his teeth. In his lap rested a straw hat, partially filled with his own brains. The fort captured by the Twenty-fifth was the key to the town, and was made of brick and stone, measuring twenty by twenty-one paces, and the walls being about two feet thick, except at two of the corners, where they were about five feet thick. There were from fifteen to twenty portholes on every side.

9/11/11

RUINS OF BLOCKHOUSE AT EL CANEY, CUBA, ASSAULTED JULY 1, 1898.



THE FLAG OF EL CANEY.

TRANSLATED FROM THE SPANISH OF LUIS DE ARMIÑAN,
BY FREDERICK T. WILSON, CHIEF OF DIVISION, WAR DEPARTMENT, A. G. O.

FROM above we can distinguish along the east the gray line of ants who are coming to nibble us. We are forming the extreme vanguard, and we know that we are here to resist the advance of a powerful, arrogant enemy. The sun is rising, and his red disc peeping above the edge of the horizon is radiating into the grey empyrean his splendid, brilliant rays. We can see the walls of "El Viso" commanding the village, from whose diminutive fosse begins the zig-zag trenches, the possession of which is to be so stoutly disputed to-morrow, and at the smell of the powder the pallid and emaciated cheeks of our feeble little soldiers revive as if by magic.

We hear shouts—enthusiastic acclamations—which are greeting the arrival of the gaunt, iron-hearted old general, who with sparkling eyes is quietly returning the salutes of

[NOTE.—*La bandera del Caney* is one of ten *brillantes* from a dainty little volume which, under the title of "*Alla Lejos! recuerdos de la guerra*" (Madrid, 1902), is from the pen of Luis de Armiñan, who was a lieutenant in the famous "Regiment of the Constitution," which put up so stout a defense of the old stone fort at El Caney on the 1st of July, 1898. From Spanish sources it is known that the garrison of El Caney was made up of three companies of the First Battalion of the Twenty-ninth Regiment of the Line (the Constitution), of the San Luis Brigade, forty men of the Santiago Regiment, one company of dismounted guerrillas with two Plasencia guns—altogether 520 men—all under the command of General of Brigade Joaquin Vara del Rey y Rubio—"del Rey del corazon de leon."

The fight at El Caney, which the story commemorates, was the attack of Chaffee's brigade of Lawton's division, made up of the Seventh, Twelfth and Seventeenth Infantry, in which our losses were three officers and forty-six men killed, and six officers and 139 men wounded—a total loss of 198. The Spanish losses were 440 of the 520 defenders of the village, including among the killed General Vara del Rey and nine officers, and among the wounded every officer but one and all but eighteen men. These figures are from Spanish sources, not always accurate, but it is known that of the 520 defenders of El Caney but eighty ever returned to Santiago.—F. T. W.]

his comrades of the battle. At his side is marching the cold, impassive colonel who commands that famous "Constitution" that is about to write with its blood the most glorious page in the history of war. The soldiers surround their chief, and one of them advancing toward the general with canteen in hand says: "Drink, my general, drink to the flag of El Caney and to the regiment of the Constitution that is



RUINS OF BLOCK HOUSE AT EL CANEY.

here to defend it," while a hundred voices cried: "Long live Spain!"

And now the bugles sharply call us to our posts, and in a moment the little hill has swallowed up the handful of brave men who are hiding themselves like moles in the trenches. Then from the left our cannon opens fire, and we notice that from the midst of a group of graceful palms there is coming a small cloud of fleecy smoke; that grenades are bursting in the air, and as they burst they scatter death. Yet no one

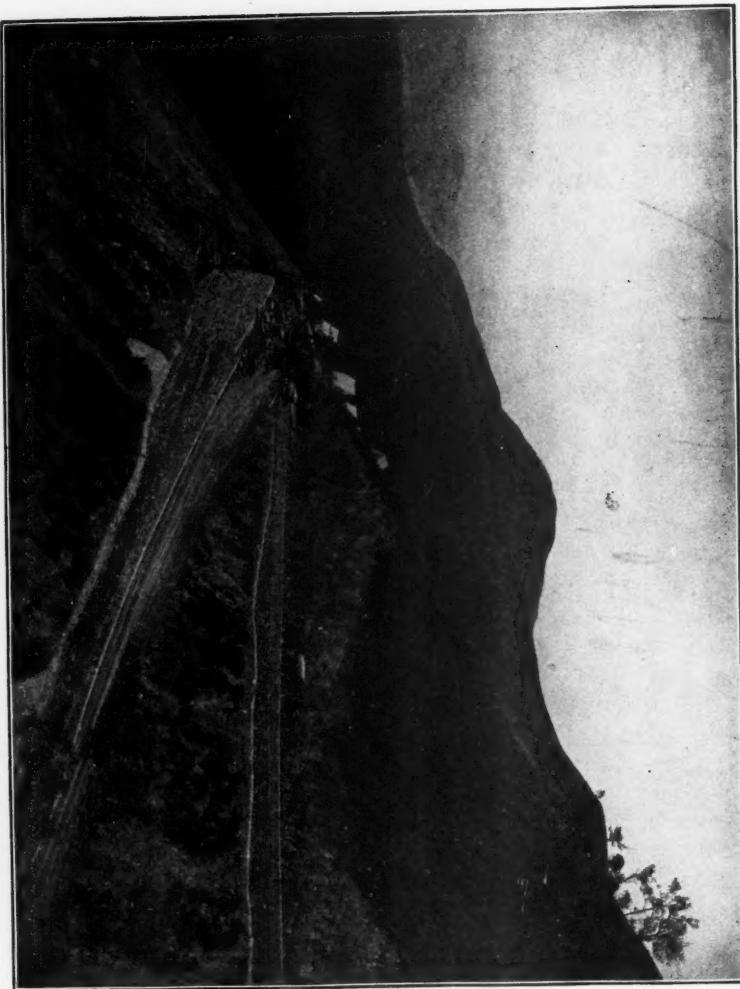
moves. It is the order that the enemy shall be permitted to uncover himself completely.

As one who is sure of his subjective superiority, the Saxons in compact masses march out through the mouth of the plain that extends along our front; they advance rapidly and resolutely, three battalions conspicuously in the vanguard. They are at fifteen hundred metres when the bugles sound the sharp command to fire, and as though our seven hundred braves are each a part of a great machine of war, the heads of our soldiers covered with their straw hats simultaneously appear above the edge of the trenches; the rocks resound from the solid, orderly discharge of our rifles, volley after volley; so that by the time the last company on the left has fired, that on the right has already reloaded its magazines and is ready to take up its turn.

The enemy is seen to stagger; to halt stupefied, swept away by dozens by the shower of lead that is vomiting from our trenches, as though they were ears of corn severed from the stalks by the gigantic knife of an inexorable reaper. They run from side to side, like dry leaves whirled by an irresistible tornado, and as it lulls we distinguish the reserve battalions running forward to check the impotent rabble in order to save the first brigade. Their chiefs, with bridles hanging loose on their horses' necks, dash about like devils distributing saber strokes on the terrified fugitives, with no other effect than to increase the carnage, while a large striped flag, that a moment before was waving defiantly in the air, is thrown to the ground. To silence our fire they try again and again to rush the attack, but with no greater success than to accentuate their impotence. The poor devils throw themselves on the ground as if wishing it to cover them, and a moment later the disorder becomes so general that they fly like madmen from the horrible destruction, and we see them hurrying in retreat to seek the support of their reserves, leaving the ground covered with their dead, with wagons, horses, stretchers.

Nearly one hour they wait before they resume the attack, varying their tactics, convinced that El Caney is impregnable. Then they begin to flank us, and with thirty-six rapid-fire

MILITARY ROAD AT BONIATO, NEAR SANTIAGO DE CUBA.



guns in place, to shell us out. They burst ten metres over our heads, but in their fury they carry away the limbs of our men, pulverizing them as if they were insects. Ah, if we could have had guns with which to reply to them.

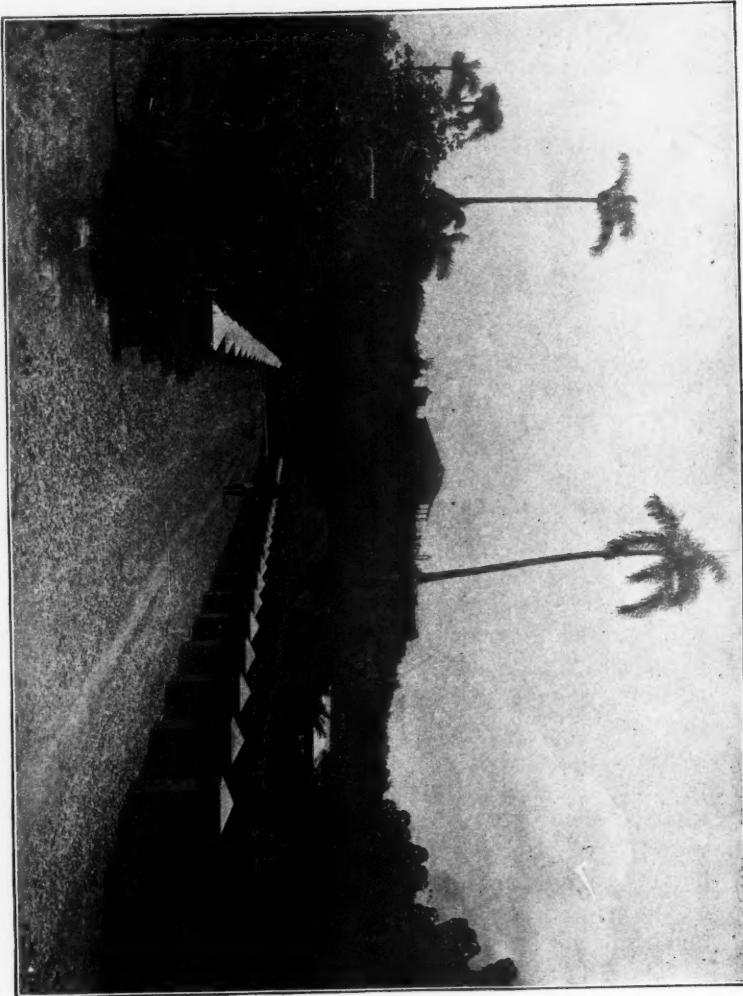
Accompanying this maneuver, they renew the attack of their battalions; but notwithstanding this, for six long hours we hold them in check without permitting them to advance one pace, and inflict great losses upon them. Our auxiliaries cannot reach us; the general is examining with his field-glasses, searching for signs of coming aid, and to this day no one has explained why we were so wickedly abandoned to the victors. Two battalions would have been sufficient to have gained a great victory for Spain. Ah, yes, we would have driven them headlong into the sea. But no one remembered us.

The defense of the village is no longer possible. How many glorious episodes during that last hour of the struggle! I saw a soldier with leg torn from the thigh continue to fire until the death palor kissed him in the eyes. I saw another with the dead body of a companion that he had rolled from the ramparts and borne in the midst of a shower of bullets until he reached the trenches. We had to fight as never troops had fought before. It is at this moment we lose our general. Followed by a group of officers and soldiers to the extreme front of the line, I see him fall pierced through the body by a cruel bullet, and with a loud cry his head falls and all is over. Without ammunition it is useless to continue the struggle. A small group—all that is left of us—we retire, pressed closely by the rapidly increasing phalanxes of the enemy. The sun sinks into infinity, coloring with melancholy red the western clouds. Twilight closes down placidly.

The flag of El Caney, tattered, torn and stained, remains in its place, lashing the air, grand, indomitable as the spirit of its sorrowful defenders.

ANW

BONIATO BRIDGE, NEAR SANTIAGO DE CUBA.



ANOTHER SPANISH VIEW.

LIEUTENANT JOSE MULLER Y TEJEIRO, SPANISH NAVY.*

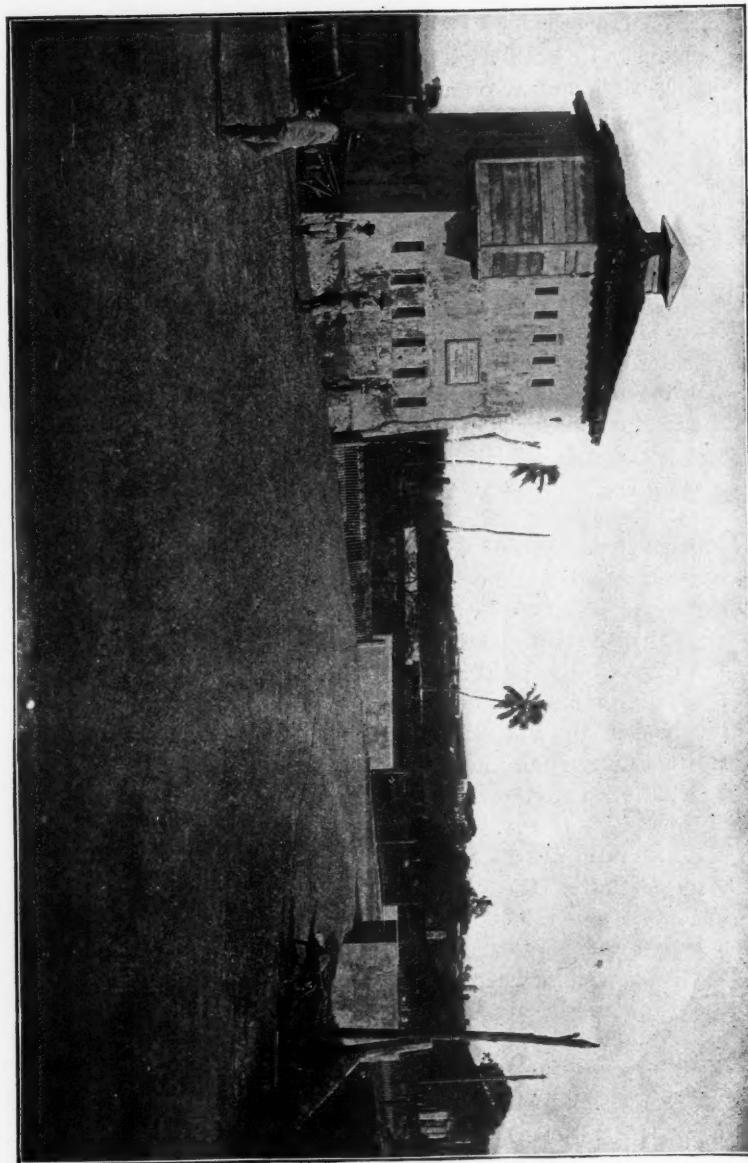
THE Americans, it must be acknowledged, fought that day with truly admirable courage and spirit. The houses of El Caney, which General Vara with his 520 men converted into as many fortresses, threw forth a hail of projectiles upon the enemy, while one company after another, without any protection, rushed with veritable fury upon the city. The first company having been decimated, another appeared, then a third, and still another, and those soldiers resembled moving statues (if I may be permitted that expression for want of a better) rather than men; but they met heroes, and although the houses had been riddled with bullets by the artillery and musketry, and although the streets were obstructed with dead and wounded, El Caney had been converted into a veritable volcano, vomiting forth lava and making it impossible to go near it.

Both sides being short of forces and out of breath, almost without having stirred from their relative positions, the battle ceased for some time, and General Vara del Rey took advantage of this circumstance to have his soldiers re-form the lines and again get ready for battle.

General Linares, who was repulsing the attacks at the position of San Juan, upon learning the result of these assaults, warmly congratulated the handful of lions in these words: "When the American army attacked El Caney they had not counted on a general of Vara del Rey's stamp, and on troops as fiery and inured to warfare as those he had under his command."

The fight commenced once more, and the enemy attacked again and again, being always repulsed, but as we had no reserve forces, and the Americans, on the contrary, had a

* From "Batallas y Capitulacion de Santiago de Cuba." (Madrid, 1899.)



OLD SPANISH FORT, SANTIAGO.

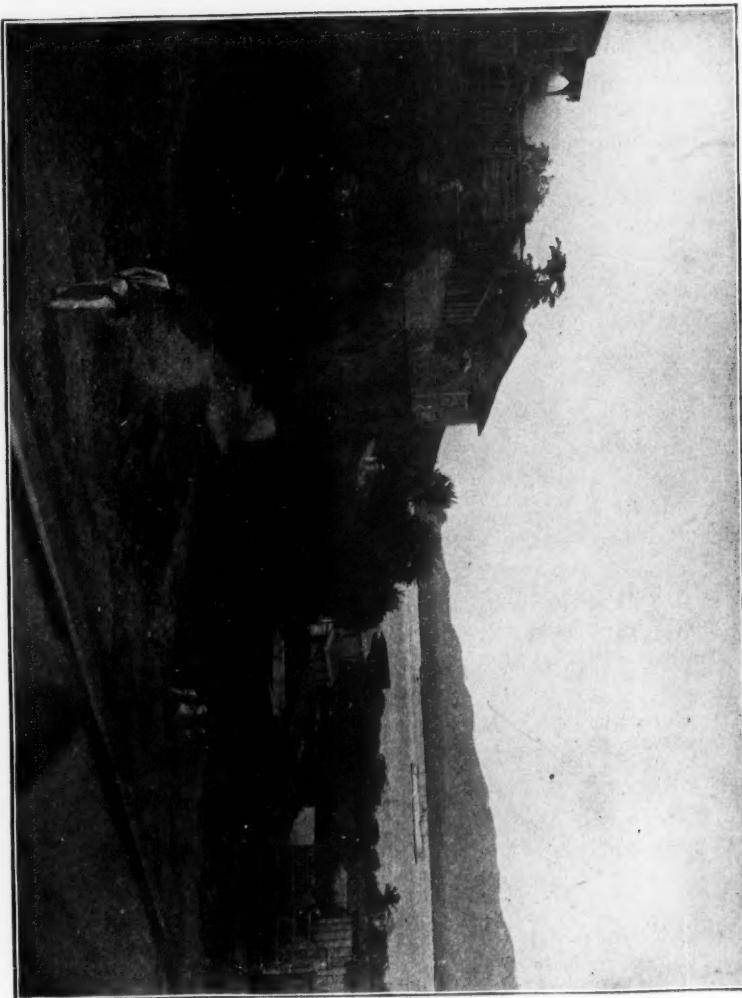
great many, the battle was no longer possible under these circumstances. The General was wounded almost simultaneously in both legs by two musket balls, and as he was being carried away on a stretcher, the bullets falling around him like hail, he was killed by a third one at the same moment as two of the men who were carrying him. The greater part of the commanders and officers (among them two relatives of the General) were dead or wounded, as also the majority of the soldiers. Finally, at 7 P. M., the commander being dead and those 520 men having been reduced to less than 100, and most of these slightly wounded and bruised, that handful of heroes, for want of forces and a commander, retreated from the site which for ten hours they had been defending without being able to get any reinforcements, for there was none to be had and the enemy occupied the position on which he, in his turn, had made such a bold attack.

Of the 520 defenders of El Caney, only eighty returned, most of them crippled and bruised. The Americans acknowledged that they had 900 casualties.

On the 1st day of July the Americans fought, as I have stated, without protection and with truly admirable courage, but they did not fight again as they did that day. They entrenched themselves and set up their artillery as fast as they received it, and did not again come out from behind their fortifications. Did they think on that first day that all they had to do was to attack our soldiers *en masse* to put them to flight? God knows.

It was difficult to convince them that only 520 men had been defending El Caney for ten hours. When doubt was no longer possible their admiration had no limits. When they entered Santiago de Cuba, the American soldiers and ours looked upon each other without any prejudice or jealousy, perhaps because they knew that both had fought like brave men, and whenever the Americans saw one of our men of the Twenty-ninth (the number of the battalion "Constitution," which had defended the city, and has been referred to so many times) they would call him, look at him, and

SUBURBS OF SANTIAGO DE CUBA.



111

treat him with great admiration, wondering, perhaps, how so simple a soldier could do such great things.

The men of the Twenty-ninth, known to have done something worth doing, were loved and feasted by everyone, and spent whole hours with the Americans, who did not understand them, but applauded everything they said, on the assumption, perhaps, that he who is brave must also be bright.

9/11

CAVALRY BITS.

BY CAPTAIN L. M. KOEHLER, FOURTH U. S. CAVALRY.

SOMETIMES in July, 1902, I had my attention called to a bit patented by a horseman at Winchester, Kansas. While investigating this bit and its trial by a cavalry officer at Fort Leavenworth, I read with interest the article on this subject by Brigadier General W. H. Carter, that appeared in the October number of the JOURNAL OF THE U. S. CAVALRY ASSOCIATION.

My object in bringing this article to the attention of the cavalry officers is to cause a discussion as to whether or not a cavalry bit can be devised and constructed on good principles. When the Shoemaker bit was superceded by the bit finally adopted and now used and known as the ordnance bit, there was a slight step made in the right direction, but no matter what improvements should be made upon the Shoemaker bit, as the principle of construction is wrong, it could never prove thoroughly satisfactory. All that can be said for the present bit, in comparison with the Shoemaker bit, is that it weighs less and has a less barbarous appearance when on the horse. The faults of the one are the faults of the other. The present ordnance bit, no matter how well adjusted on the horse, has the following defects, namely:

First. When tension is applied to the reins, the mouth-piece is slightly raised out of position.

Second. The upper branch, no matter what its length, rotates to the front, causing a pull on the cheekpiece and the crownpiece.

Third. As the branches rotate, the upper to the front and the lower to the rear, the lower lip and corner of the horse's mouth is caught between the curb strap and the lower branch, causing abrasion.

Fourth. Restive horses are constantly turning the bit over so that the lower branch is on top, and the rider in consequence practically losing control of his mount.

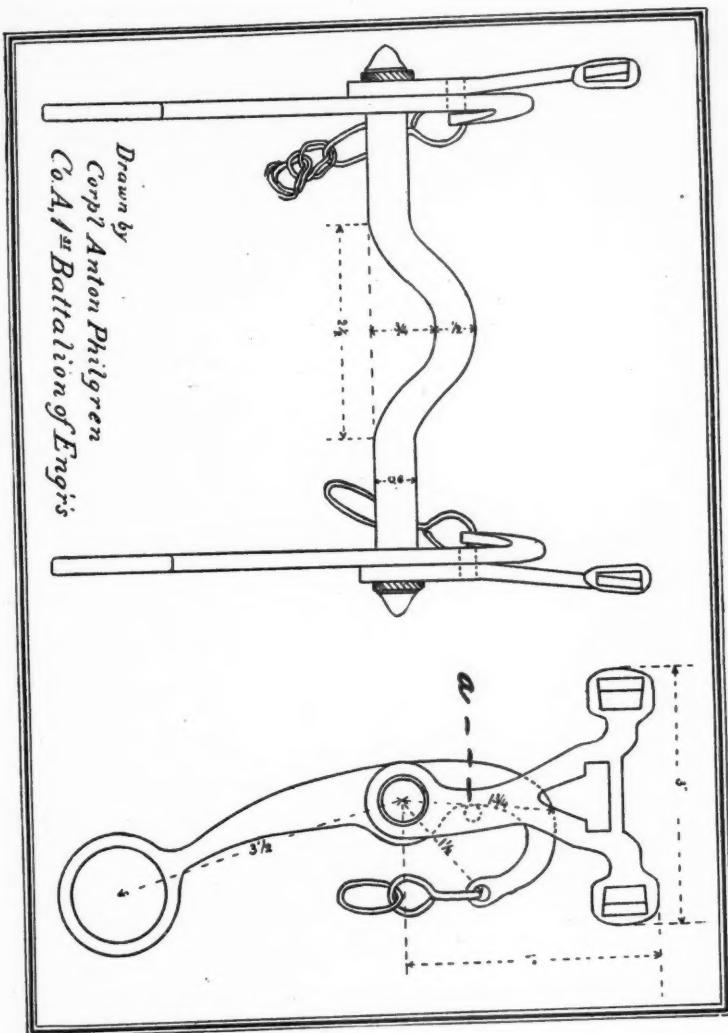
Fifth. In almost every case when tension is applied upon the reins, the mouthpiece mounting in the horse's mouth displaces the curb strap, causing it to rise up out of place.

I believe no cavalry bit will ever prove satisfactory which is constructed so that both branches will rotate together. To obviate the faults above enumerated it is absolutely necessary that tension on the reins will in no manner displace or disturb the attachment of the bit with the cheekpiece. No matter what the proportions of the upper branch to the lower branch may be, the size of the mouthpiece, of the port and material of which the curb strap is made, they will never produce a perfect cavalry bit when applied to the principles of construction as employed in the present ordnance bit.

The curb strap of the ordnance bit is faulty, but a flat mail chain, while an improvement, cannot correct the wrong principle of construction. The relative length of the lower and upper branches is the test of the severity of the bit. A good horseman with a light hand might have these proportions exaggerated so as to appear ten to one, and yet control his horse perfectly without inflicting pain upon the horse. A recruit with a heavy hand might have these proportions almost reversed and still cause unnecessary suffering to his mount.

I believe the bit that I have the pleasure of bringing to the attention of the cavalry officers, of which the plates are marked "A" and "B," is one that upon trial and examination will be found to obviate the faults found with the present bit. The proportions as given in plate "A" of this bit follow the lines of construction of the ordnance bit. These can be changed at any time when trial would find it advisable. The mouthpiece could be of any size, solid or hollow; the port altered to please; and the relative length of the branches such as would assure control of most of the cavalry horses.

Upon examination of plates "A" and "B" it is seen that tension applied by the reins cannot be transmitted to the cheekpiece and the crownpiece as the branches rotate on

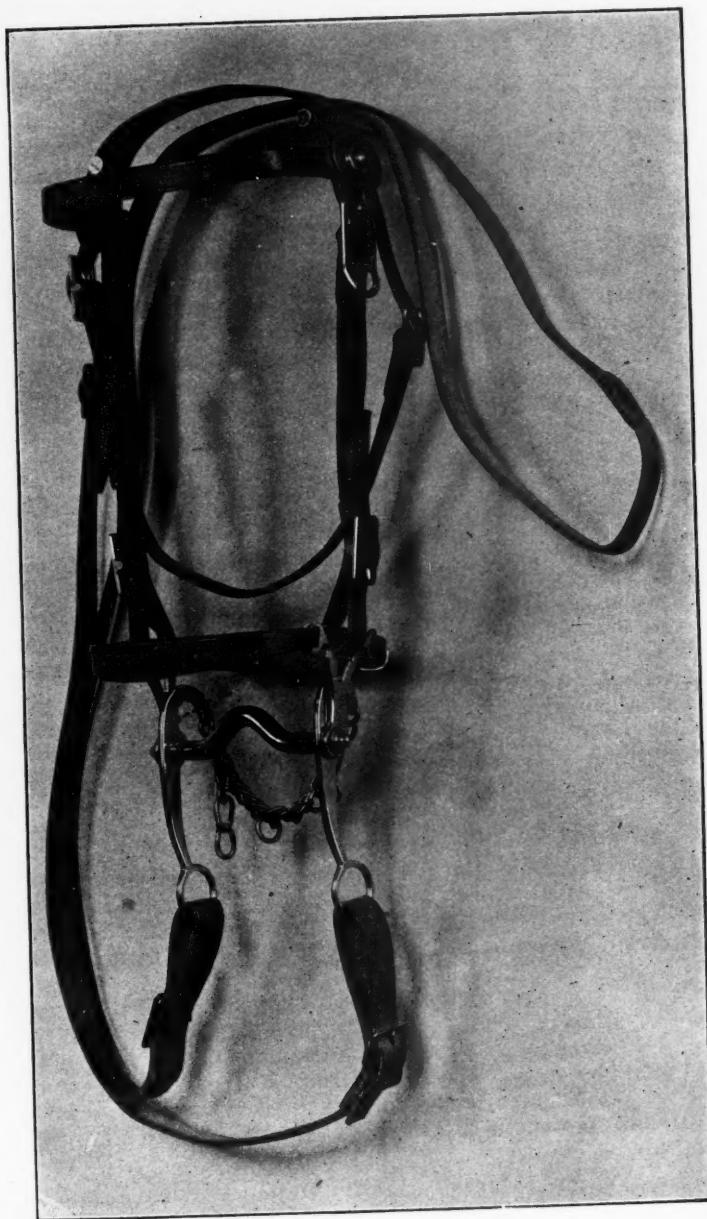


the mouthpiece independently of the attachment to the bridle, and act directly upon the curb strap. Tension upon the reins will have but a slight tendency to cause the mouthpiece to rise in the mouth. It can never pinch the corner of the mouth nor the lips, causing abrasions, for the same reasons. The lower branches can never be thrown to the front over the horse's nose, because they are held in place by the stud "a." As the lower and upper branches revolve on the mouthpiece, it simply increases the tension on the curb strap without displacing it in any way. The principle of construction of this bit appears to be almost ideal for cavalry uses. The only objection is the extra leather for the nose band needed in its attachment to the bridle. Should the upper branch be increased in length, as suggested by General Carter, it would simply mean that upon tension being applied to the reins the upper branch would rotate so much farther to the front, causing increased tension on the cheekstraps and crownpiece. All know how sensitive most horses are to pressure exerted on the poll, and this should be obviated if possible.

In regards to the present ordnance bit, I would call attention to Fig. 59, page 194, in Carter's "Horses, Saddles and Bridles," which is a good illustration of the faulty position of the curb strap, universally met with, of the ordnance bridle.

I would suggest that the Ordnance Department enter into negotiations with the patentee for the construction and use of one hundred, or more, experimental bits to be issued to cavalry officers of experience for trial and report.

The bit was invented by Mr. W. C. Johnson, of Winchester, Kansas.



COMMENTS ON THE JOHNSON BIT.

BRIGADIER GENERAL W. CROZIER, CHIEF OF ORDNANCE, U. S. ARMY.

Replying to your letter of February 13th last, enclosing an advanced copy of an article by Captain L. M. Koehler, Fourth Cavalry, on the subject of "Cavalry Bits," which article sets forth the merits of a bit invented by Mr. W. C. Johnson, of Winchester, Kansas, I have the honor to inform you that this Department has directed the procurement, by the commanding officer of the Rock Island Arsenal, of one hundred of these bits for issue to the service for trial.

BRIGADIER GENERAL W. H. CARTER, U. S. ARMY.

The bit invented by Mr. Johnson and recommended by Captain Koehler for trial is constructed upon the principle of the Chifney bit, invented in England more than a century ago, and introduced into the U. S. cavalry some fifteen years ago as the Whitman bit. It is possible that the Whitman halter-bridle and bit are still covered by patents. This combination halter-bridle and bit seemed to contain so many desirable features that its advocates have never quite understood why it was not permanently adopted. There is nothing wrong with the principle of construction, but the Johnson bit is a doubtful improvement on the Whitman, unless the nose band and stud may be considered so.

The evolution of a proper cavalry bit has been very slow, and if the cavalry arm does not agree upon a model and secure its adoption while the present liberal-minded chief of ordnance is bending his energies to perfecting equipments of all kinds, it will be the fault of cavalry officers. The majority of officers are deeply interested in the subject, but an hour of mounted drill each day is not sufficient to qualify young gentlemen as experts in horsemanship. Young officers should not be expected to train all the remounts and instruct all the recruits, but time devoted to this work is well spent, and implants a knowledge in the officer which he will obtain in no other way.

Some officers habitually use the bit and bridle, and continue to urge its adoption for troopers. The Cossacks are

about the only cavalrymen in Europe who ride with the single rein, but that is no argument in favor of the double reins. The writer has always urged against the adoption of bit and bridoon for use in campaign. There is no reason why horses should not be trained with curb and snaffle during peace; the new watering bit can be utilized for this.

The broad curb strap complained of by Captain Koehler was introduced to replace a narrow strap which made sores after it had been wet a few times and become stiff. The mail chain is now being supplied to replace the strap, and if the curb bit is not drawn up too high in the horse's mouth the chain will fit the chin groove properly.

If the new model bit does not prove satisfactory, by all means let experimentation go on until something acceptable is found. Some of the best curb bits in use have straight branches, and investigation need not be confined to those with curved branches. After all is said and done, it will be found that some horses will go well with almost any kind of a bit, and some high spirited animals may be depended upon to make trouble even when ridden with a snaffle. The best cure for the restiveness which disturbs some cavalry troops, is work and plenty of it. Often the trouble lies not in the bit, but in the fact that the horse is not used enough to make him quiet.

COLONEL J. A. AUGUR, TENTH U. S. CAVALRY.

The objections to the present bit are as stated, and can be partially remedied only. In the CAVALRY JOURNAL for March and June, 1895, page 148, the defects of this bit were pointed out. It has been only recently that snap hooks for the bit were furnished to fasten the curb strap. This is a great improvement. The new curb chain is too heavy, and in my opinion not a suitable one. When the curb chain was shown to an officer of many years of service, he remarked: "The Quartermaster's Department must have on hand a lot of fifth chains that could be utilized in the manufacture of such curb chains." The present bit has few friends, yet every one is doing his best to make it serve its purpose.

The bit referred to by Captain Koehler I saw for a few moments at Fort Leavenworth. In my opinion it would have to be changed and modified somewhat. The only way to find out what its merits are is to have a certain number manufactured and sent to each regiment for trial and report. A bit is such an important part of a horse equipped for drill,

for war, for pleasure, that it seems there ought to be no trouble in securing a good bit. So far the cavalry has not succeeded, and it now remains to be seen whether we will still be content with what we have or try to get a serviceable bit.

LIEUTENANT-COLONEL ALEXANDER RODGERS, FIFTEENTH U. S. CAVALRY.

This bit seems worth a trial. The idea of the upper and lower branches revolving separately is good. The best that can be said of our present bit is that the Shoemaker and the McClellan bits were worse than it. The curb strap should unquestionably be replaced by a well made curb chain. This should be of the best quality, as cheapness in such matters is poor economy at the best.

I am strongly in favor of the introduction into our service of the bit and bridoon. Every officer of the mounted service has seen many horses ruined by the constant use of the curb bit by men with hands too heavy to use it properly.

Most horses can be controlled by the snaffle bit alone, and their mouths are thus kept sufficiently sensitive for them to be controlled in case of runaway by a gentle use of the curb. By means of good keepers on the curb reins and of careful supervision on the part of officers and non-commisioned officers the use of the curb could be restricted to certain designated men and horses, and to the rare cases when horses run away and cannot be brought down by the use of the snaffle. Most of the so-called hard-mouthed, runaway horses are in reality horses whose mouths have been ruined by harsh curb bits and heavy-handed riders. They run away in the hope of escaping the punishment of the bit.

MAJOR GEORGE F. CHASE, SEVENTH U. S. CAVALRY.

It is evident that the ideas are excellent. We may well afford to experiment as suggested. A proper bit for cavalry service is very important. I should like very much to see the one represented tried.

MAJOR W. D. BEACH, TENTH U. S. CAVALRY.

The article is concise, interesting and accurate, and should draw out some valuable comments. The five objections to the Ordnance bit, noted by the writer, are familiar

to all cavalrymen, and will appeal with special force to those who have ridden restive or badly broken horses.

The attaching of the cheek pieces of the bridle to the upper branches of the bit seems a universal fault (if it is a fault) in military bits, and it is believed there must have been some good reason for so doing instead of attaching the head-stall to pieces having a motion independent of the branches and of each other. Possibly the one-piece military bit is a compromise.

Admitting that the present style of bit is faulty, are there not serious objections to the proposed substitutes?

Without having seen the bit in question, I should think that the bearings of the attached supports would soon become clogged with rust unless they were made detachable, in which case there would always be the liability of the thumb-nut working off and the bit dropping. Again, the supports, while comparatively light, must be made heavy and strong at the bearings, adding possibly one-third to the weight of the bit.

The extra leather for the noseband is objectionable, because it is only a half inch wide, and although subjected to but little strain, will hardly stand prolonged rough usage in the field. Why is the noseband necessary anyway?

It seems doubtful if the upper branch of the curb is strong enough for service.

The principle worked out in this bit has probably been tried before in the cavalry service, and the weight with other faults found more objectionable than the unscientific single piece bit.

The principle involved in the proposed bit is correct, and if this one does not solve the difficulty, there seems no good reason why some modification of it should not do so. There is a wide field for investigation.

MAJOR G. H. G. GALE, NINTH U. S. CAVALRY.

The only new principle involved in the construction of the Johnson bit is the bending of the upper branches to the rear, apparently to avoid interference with the lug which fastens to the cheek-piece. In practice this may work well, but theoretically it will, by changing the direction of the pull, cause the curb to rise out of the chin groove, thereby causing the trouble mentioned in Captain Koehler's fifth objection. If the drawing is correct this would cause a rise in

the hooks of nearly .45 of an inch with a $1\frac{1}{2}$ -inch branch—too much, it would seem, for the horse's comfort.

It would seem, therefore, that under no circumstances could a strap be used as a curb, and I have always believed that the reason for a curb strap rising out of the chin groove was due to the lack of flexibility of the material, which is expected to bend easily in the direction of its width. The displacing of the mouthpiece may contribute to this end, but very slightly.

The other principles involved in this bit are very old. The Whitman bit embodies them all, with a more slight and convenient and a lighter device. In combination with the halter, the Whitman bit revolves easily in the mouth, is prevented from throwing over by the noseband and a simple device which prevents the upper branch from passing the snap, and is, all in all, a much handsomer and lighter article than the bit in question.

I have in my possession and have used for several years, a bit made many years ago by the late Captain Shoemaker, which is designed on the same lines. The lug outside of the branches has, however, a simple slit for the cheek-piece. It is a very satisfactory bit, more so than any other I have been able to obtain. This bit also has a simpler and apparently better device to prevent throwing over than the stud on the Johnson bit, which would seem to be apt to accumulate filth and perhaps pinch the horse's lip.

MAJOR GEO. H. PADDOCK, FIFTH U. S. CAVALRY.

The question of a proper bit for the cavalry horse is one of great importance and may well engage the attention of the Cavalry Association.

Without quite agreeing with Captain Koehler in some of his conclusions, there can be little doubt about the correctness of his objections to the present service bit.

With regard to the bit proposed, it seems in principle to much resemble the "Whitman," except that it lacks the handy attachment "snaps" that permit the removal of this bit from the mouth without taking off the bridle—a great convenience for grazing upon short halts.

It has an advantage in its "stud" that prevents "falling through."

From the shape of the lower branches it would appear to be open to an objection not enumerated by Captain Koehler

to the service bit: *i. e.*, the objection of permitting the horse, if disposed, to catch the lower branch upon the teeth of the lower jaw and thus prevent the action of the "curb." While only a few horses in a troop will usually develop this very objectionable habit, it is one that can be prevented alone by the shape of the lower branches. For this reason the old Shoemaker bit was given the rounded curves that produce its "barbarous" appearance.

I have always thought that the Whitman system of bridle and bit should be used in our service, doing away, however, with the halter headstall entirely and substituting therefor the neck strap to which either halter shank or lariat may be attached as occasion requires. The Whitman bit can be modified if necessary; the lower branches might be lengthened and shaped to prevent catching upon the jaw, and a "stud" could be placed to prevent falling through.

Many other minor considerations, such as adjustments for size and plain numbering of bits to prevent exchanging, should also bear weight in determining the best bridle and bit for use in the cavalry.

It would seem to me better to ask for a board of competent cavalry officers to examine and thoroughly experiment with all kinds of bits and bridles that the enterprise of manufacturers and ingenuity of members of the service might submit or suggest, than to follow the suggestion of Captain Koehler, that the "Ordnance Department enter into negotiations with the patentee for the construction and use of one hundred or more experimental bits to be issued to cavalry officers of experience, for trial and report."

MAJOR D. C. PEARSON, SECOND U. S. CAVALRY.

It is to be hoped that the Johnson bit may have an early trial. I am impressed by Captain Koehler's clear statement of the merit of the bit in comparison with the one in use.

There is not the slightest doubt but that if the horse could analyze his sensations for us and if he were equipped with the vocabulary of bits and bridles, of his own dental, lingual and labial belongings, we should be better informed of the practical operation of bits, and likely enough be told that all bits were bad.

I have seen the blacksmith who could locate any pain or ache in the horse's foot and relieve the same almost as if the

horse had told him. Perhaps there is a farrier who could as well diagnose all the horse's bit sensations.

The horse I ride expresses his objection to the present bit by almost constantly trying to turn it upside down in his mouth, which is defeated by reins crossed behind his chin.

It seems so highly probable that the proposed bit with separately rotating branches, and with diminished tension upon cheek and crown pieces would be a good substitute for the bit now in use, that it would be a mistake if it failed at least of having a good trial.

MAJOR C. B. HOPPIN, FIFTEENTH U. S. CAVALRY.

I agree with Captain Koehler as to the defects of the present cavalry bit, every one of which is evident. I believe the proposed improvement to be along the proper lines. I do not see the necessity for the forked attachment which I would replace with one, the upper end of which should be a snap. This would obviate the necessity of having a noseband, while the cheek piece of the bridle could terminate in a small ring of this shape: . The back of each snap should be provided with a stud to prevent reversal of the bit.

It seems to me that these modifications would not interfere with the proper action of the curb, would not require a noseband, would make the bridle slightly lighter, and would avoid the dangerous contingency of having a restive horse throw up his bit and thus get out of control.

CAPTAIN E. ANDERSON, ADJUTANT SEVENTH CAVALRY.

Captain Koehler states the defects of the present bit very clearly, the third being the most serious. I think this defect could be largely remedied by having the upper branch made one-half inch longer, so that it would be one and three-quarter inches from the center of mouthpiece to the point upon which the curb strap acts, instead of to the center of upper branch ring, as at present constructed. This would be in accordance with specifications laid down by Dwyer, making the upper branch one-half the length of lower. Pinched and bruised lips almost invariably accompany the use of this bit. If this fault could be eradicated the present bit would be an excellent one. The fourth defect mentioned can be neutralized by tying a small strap to the two rings of the lower branches and having it connected with the curb

strap. The other defects enumerated are not of very serious importance. A careful study of the plates make me believe that the bit proposed by Captain Koehler might be an excellent one. I would like very much indeed to give one of these bits a trial.

CAPTAIN W. W. FORSYTH, SIXTH U. S. CAVALRY.

As Captain Koehler says, our present bit has, in a modified form, the faults of its predecessors. These faults are not imaginary; they do exist. The bit with bridoon has been suggested as, at least, a partial remedy, but while I have had no experience with the bit and bridoon, and my opinion thereof is consequently in suspense, I believe that a single rein bit that is without serious fault would be preferable to the bit and bridoon. It would be lighter and simpler.

Every bit that promises a solution should, I think, be tried. The Johnson bit looks to me decidedly promising, and I hope it will be tried. I should like to have an opportunity to try it myself.

CAPTAIN GEORGE H. MORGAN, THIRD U. S. CAVALRY.

Some of the faults of the present bit are well stated by Captain Koehler, and although a good horseman can do fairly well with a defective piece of harness, he can do better when not thus handicapped. If it is possible to obviate the known defects of the bit now in use, all cavalrymen would like to see it done. The bit is such an important part of the horse equipment that any step towards the solution of the problem should be given careful consideration.

It is a fact that without the greatest care a horse may be rendered restive by the mechanical defects of the present curb bit, with the accompanying troubles to himself, his rider and the organization. To overcome these troubles takes time, and we shall always want time.

If in practice the submitted improvement may prove defective in some minor part, the idea seems to me to be correct in principle.

CAPTAIN GEORGE H. SANDS, SIXTH U. S. CAVALRY.

Under the caption of "Cavalry Bits," Captain L. M. Koehler presents very plainly, and convincingly, the necessity of changing the present ordnance bit. The substitute,

the "Johnson bit," is a modification of the Chifney and of the Whitman, and meets more closely the demands of correct bitting than any I have heretofore examined. Theoretically, the ordnance bit meets the requirements; practically, as soon as the lever action is brought into play the theory is upset, and a lever of the first-class is substituted for one of the second. The Johnson patent would enable us to keep to the theoretical lines. It is suggested that a lip strap be provided, because many horses pick up the branch with lips and teeth.

After a very comprehensive course on this and kindred subjects, with the graduating class, the practical working was explained on much the same lines followed by Captain Koehler, and models of the Chifney and Whitman were shown in illustration. The bit under discussion would have been nearer the mark, owing to proportions, dimensions and certain modifications. Of course, the subject will be threshed out; but let us get together and support this bit, which all who have gone deeply into the subject must approve.

As a matter of information for the Council, I will state that all we have to do is to unite, present fairly our needs, with plans and specifications, and the Ordnance Department will be found ready and eager to assist. I know that this spirit exists, because I have tested it.

CAPTAIN J. C. WATERMAN, SEVENTH U. S. CAVALRY.

It has been a matter of experiment in my troop to overcome the defects in our present cavalry bit, that are so well stated by Captain Koehler. Ugly washers next the branches and on the mouthpieces have protected the lips and corners of the mouth; unsightly strings from rein rings to curb strap have prevented throwing the branches to the front. Many horses, owing to the mounting up of the curb strap and mouthpiece, fear the curb strap more than the mouthpiece and go about unmanageable, noses in the air, the moment tension is brought to bear on the reins.

This Johnson bit is similar to the Whitman, which attaches to the halter bridle by snaps, the lower ends of which rotate on the mouthpiece which is firmly fixed to the branches, and yet a greater rotation than ninety degrees is prevented by a lug at the bearing on the mouthpiece, and the horse cannot upset the bit. This seems better than the stud. If, as Captain Koehler seems to say, the mouthpiece in the Johnson is attached to the bridle attachment and the

branches rotate on mouthpiece, the bit will have curb action but no port action.

I would prefer the upper end of the bridle attachment to end in a plain ring and do away with angles, short corners and slots which wear bright, hurt the horse or are hard to clean. The bearing between the branches and bridle attachment is apt to rust. I hope a bit of this general pattern will be given us for trial.

CAPTAIN H. C. BENSON, FOURTH U. S. CAVALRY.

I quite agree with Captain Koehler in everything he has said regarding bits and biting, and his idea of urging the issue of a number of the bits patented by Mr. Johnson very timely. The present bit is a great improvement over the Shoemaker bit, but it is far from being a perfect bit.

For myself, I believe in and use a double bit, curb and bridoon, the curb bit being one with quite a large curved bar, with no port; and a chain, not a strap, is used. I believe that if the two bits were once generally used in the service by troopers, a single bit would not again be considered. The objection that a trooper can not conveniently hold two reins and use his arms is not of much weight, for by the time he is required to use his arms in actual combat, he will have become perfectly accustomed to managing both sets of reins with one hand. If but one bit is to be used, one without the defects mentioned by Captain Koehler is very necessary, and I believe it more than likely that the Johnson bit may be the one to answer the requirements. I am greatly in favor of giving it a trial.

CAPTAIN T. Q. DONALDSON, EIGHTH U. S. CAVALRY.

Cavalry officers, I am sure, will be glad to see the subject of bits again taken up in the columns of the JOURNAL, and it is to be hoped that its discussion will result in a satisfactory bit for the cavalry service.

Captain Koehler covers fully the defects of our present bit, the most important, in my opinion, being indicated under his "third" and "fourth" headings.

Judging the Johnson bit by the inclosed plate, and by Captain Koehler's description, it seems to be superior to our present cavalry service bit.

One advantage in this bit, other than that given by Captain Koehler, is that the upper branches, intended for the at-

tachment of the curb chain, projects to the rein and downward, thus preventing the tendency of the curb chain to rise when pressure is applied to the lower branches.

One disadvantage appears to be that the two upper branches on each side are in contact for more than an inch.

Unless great care was taken to prevent it, these branches would be liable to stick together from rust or from being slightly bent, and would fail to rotate on the mouthpiece, thus defeating the object of the bit. This defect, however, could be easily overcome by roller bearings.

I would like to see this bit issued to the service for trial.

CAPTAIN ALONZO GRAY, FOURTEENTH CAVALRY.

Regarding the Johnson bit, about which the discussion was started by Captain Koehler, the principle seems to me to be superior to any I have ever had the opportunity to study. The only improvement I could suggest would be to make one width of mouthpiece, with one-fourth inch disks, which could be transferred from the inside to the outside of the branches, thus making every bit adjustable in width to the mouth of any horse. The matter of an adjustment in width is too important to be overlooked.

CAPTAIN W. H. PAYNE, COMMISSARY SEVENTH CAVALRY.

I consider Captain Koehler's discussion of the faults of the ordnance bit to be very complete, and in the main correct. The proposed model appears to be an improvement in principle over any design I have seen. It ought to be tested, and should prove a success.

CAPTAIN E. B. WINANS, FOURTH U. S. CAVALRY.

I agree with Captain Koehler in most that he says about the ordnance bit. While it is undoubtedly a great improvement over the Shoemaker bit, it is far from perfect.

The principle of the bit advocated by Captain Koehler is not a new one. It is that of the Whitman bit. I have used one for eleven years, and have found it the most satisfactory bit that I know. The stud on the Johnson bit is, however, an improvement. With a restive horse the Whitman bit "tumbles" even more easily than the regulation bit.

One other criticism I would make on the ordnance bit: The pronounced S is not a graceful shape, and the extra material in it of course adds slightly to the weight.

The shape of the Johnson bit, technically known as the "saber bend," is good.

I certainly would advocate its issue for trial, though from what I gather without an actual trial of the Johnson, I would prefer the Whitman of the two.

CAPTAIN H. H. PATTISON, THIRD CAVALRY.

The article on "Cavalry Bits" by Captain Koehler has been received, and was read with interest and hope. I agree with him in all the objections he offers to the ordnance bit, and that an entirely satisfactory bit with continuous branches cannot be made. However, the bit he presents as overcoming the objections noted appears to have its faults. If "the lower and upper branches revolve on the mouthpiece" there is nothing to necessarily change the position of the port after the bit is placed in the mouth, and the proportion of pressure received on the tongue may remain constant when tension is applied to the reins instead of decreasing by the revolution of the arch of the port upward. It would appear to be better if the lower branches were fixed to the mouth-piece.

It is difficult to determine the exact action of the different parts from the drawing alone, but apparently tension on the reins would at first exert more of an upward pull on the curb strap than even the ordnance bit.

Considering the lower branch above and below the mouth-piece as a lever, the length of the upper arm reaches its maximum when the lower arm is almost horizontal and at its minimum of length, so that much lever power is lost. Apparently it would be better to change the shape of that part of the lower branch above the mouthpiece, making it straight and slightly inclined to the rear of the prolongation of the lower parts of the lower branch. To provide a passage for the curb chain fastening, the upper branch could be made with a small outward curve at the proper distance above the mouth-piece.

As there should be no tendency for the upper branches to revolve, I do not see the necessity for the noseband and the consequent additional parts of the upper branches.

CAPTAIN LANNING PARSONS, EIGHTH U. S. CAVALRY.

The Johnson bit, mentioned in Captain Koehler's article, is one that I have given a trial of about eight months. I used this bit during the maneuvers at Fort Riley, Kansas, and had occasion to show it to several cavalry officers, all of whom expressed themselves favorably as to its being the *bit* best adapted to our service.

This bit overcomes the following defects of nearly all other bits:

1. The curb chain always remains in the chin groove.
2. It is impossible to pinch the corners of the horse's mouth.
3. No pull is brought to bear on top of the horse's head, which, with the ordinary bit, when tension is applied on the reins, displaces the bar of the bit in his mouth.
4. It is impossible for the horse to throw the bit over.

Force is applied at proper points, which makes it more humane, the horse always yielding to it without resisting. This bit has been further improved by making an adjustable and interchangeable mouthpiece, so that it can be accurately fitted to the horse's mouth.

The trial I have given it calls for a favorable comment, and I should like to see the bit given a trial by cavalry officers and hear their reports, as Captain Koehler has requested.

VETERINARIAN C. D. McMURDO, TENTH U. S. CAVALRY.

Although I have only read a description of and seen a print of the so-called "Johnson" bit, it looks as though three of the objections to the present ordnance bit, viz: causing pressure on the poll, upsetting and pinching the corners of the mouth between the side piece and the curb, may be overcome by its use. But no bit is going to prove effectual unless it is fitted properly to the horse's mouth and the men are instructed in the use of the bit.

At present the majority of men have an idea that they can pull a horse up by main force; that their strength, supplemented by a severe bit, is greater than that of the horse. My experience has been that in a great number of cases of so-called hard mouth, the horse has been really very tender mouthed, and his pulling is due to pain caused by the bit. In several instances I have substituted a snaffle for a curb, when the horse has gone very quietly and without any pulling or fretting.

Very little care is taken to fit a bit to the horse's mouth. I frequently see a horse with a wide jaw wearing one of the narrow-sized bits, and consequently sores on each side of the lips; and a narrow-jawed horse with the widest bit, which allows the port to press on the inside of the jaws. The curb strap is almost invariably too tight and the bit too high in the horse's mouth.

It is my opinion that more care should be taken in properly mouthing new mounts, and then seeing that the bits fit each animal. When a man changes horses he usually retains his old equipments, including the bit, using it on his new mount, utterly disregarding the fact that the horses may have very different sized mouths.

I find that we have very few broken jaws with the present bit, while with the "Shoemaker" bit they were of frequent occurrence.

I could tell a great deal more about the advantages and disadvantages of the Johnson bit after I had seen it used for some time. It is very difficult to get one bit that is suitable to every horse and to every rider.

My suggestion would be to get a bit with which a heavy-handed rider can hurt his horse as little as possible. I do not think that a single bit can be manufactured that will ever take the place of the bit and bridoon.

CAPTAIN M. C. BUTLER, SEVENTH U. S. CAVALRY.

The bit invented by Mr. W. C. Johnson, of Winchester, Kansas, appears to be a good bit; certainly an improvement on the one we have. The principle of independence of motion of the upper and lower branches is a sound one. From the print there seems to be considerable metal in the upper branch; I am not prepared, however, to criticise that feature until I see the bit used. On the whole I like the bit. I heartily endorse Captain Koehler's suggestion that the Ordnance Department issue some of these bits to each cavalry regiment for trial.

CAPTAIN A. S. HAMMOND, ADJUTANT EIGHTH U. S. CAVALRY.

From the cuts and description of the cavalry bit mentioned in the article of Captain Koehler, I should think it would be an excellent thing to adopt. Personally, I should prefer it to be made with not so much metal in that portion of the mouthpiece to which the cheekpiece is attached. In other words, unless there is some mechanical difficulty in the way, it seems to me that it would be a good thing to do away with the noseband, and three openings—two for the noseband and one for the cheekpiece—have simply one for the cheekpiece, and do away with the noseband, thus reducing the amount and weight of metal necessary for the additional openings through which the noseband passes. I would suggest, also, that the flare in the upper portion of the mouthpiece commence immediately above the end of the mouthpiece instead of a quarter of an inch, or possibly more, above, as it shows in the plate, and that the upper portion of the branches be likewise made to flare from the same point. The mouth of the horse really tapers from the corner of the mouth, and the entire upper portion of the bit should, in my opinion, conform to this shape in order to avoid any possible chafing. With these improvements I think the bit would be as nearly satisfactory as it could be made.

CAPTAIN E. L. PHILLIPS, THIRTEENTH U. S. CAVALRY.

I agree with substantially all of the statements contained in Captain Koehler's article on "Cavalry Bits." The present bit is, in my opinion, a distinct gain over the old Shoemaker, but it has the five faults enumerated by Captain Koehler, and the third, viz: the pinching of the horse's mouth at the angle of the lips, is a very serious matter, which the most careful adjustments often will not remove. The curb strap is also not satisfactory. Every intelligent effort toward perfecting our equipment should of course be heartily supported and assisted by the Ordnance Department, and it is to be hoped that opportunity will be offered for a fair trial of the bit mentioned. While not willing to give unqualified approval to any bit without an actual trial, this bit seems to involve correct principles of construction, obviating all the essential defects of the present one. At any rate, let us have a careful trial of it.

MAJOR JOHN BIGELOW, JR., NINTH U. S. CAVALRY.

Captain Koehler does not give the weight of this bit and bridle; it must be considerably more than that of the present bit and bridle. The substantial advantages of the proposed bit may be obtained without the rotation about the mouthpiece, which is the principal cause of the increase in weight, and does not seem to afford any commensurate advantage.

Captain Koehler says: "Upon examination of plates 'A,' 'B,' it is seen that the tension applied by the reins cannot be transmitted to the cheekpiece and the crownpiece, as the branches rotate on the mouthpiece independently of the attachment to the bridle * * * ." The independence with which the mouthpiece rotates lasts only so long as the curb strap is not brought into action. Once the tension on the reins has brought the curb straps into the chin groove and made it taut, the rotation about the mouthpiece gradually ceases, and rotation about the curb strap commences; tension upon the reins is then transmitted to the cheekpiece and crownpiece, as in the action of the present bit.

CAPTAIN C. D. RHODES, SIXTH U. S. CAVALRY.

Every cavalry officer of experience has had to contend with the defects in the present ordnance bit, enumerated by Captain Koehler. The mouthpiece would rise with pressure on the reins; much undue strain came upon the crown and cheekpieces; painful blisters formed on the horse's lower lip, due to pinching between lower branch and curb strap; the annoying habit of throwing the lower branch over the nose, was of daily occurrence; and with pressure on the reins, the curb strap rose upon the sharp bones of the lower jaw, and failed to perform its true function.

The bit submitted by Captain Koehler seems founded on scientific principles, and is worthy of careful trial. It would be a waste of time to judge of this experimental bit through study of the sketch and photograph, for we all know how many proposed articles of equipment are theoretically perfect, but practically useless. Outside of its complexity and apparently increased weight (much of which would be taken up by the noseband) the proposed bit seems to possess many advantages; and even should it have to be modified, its careful trial should, ultimately result in the evolution of a decided improvement on the present model.

MAJOR E. P. ANDREWS, THIRD U. S. CAVALRY.

The bit described by Captain Koehler seems to meet the requirements of a good cavalry bit, and to do away with the objectionable features of the present ordnance bit.

I heartily approve the suggestion that the Ordnance Department obtain a supply of these bits for issue to troops for experiment and report.

MAJOR CHARLES M. O'CONNOR, FOURTEENTH U. S. CAVALRY.

About thirty years ago Captain Shoemaker, Ordnance Storekeeper, at Fort Union Arsenal, New Mexico, manufactured several bits involving the rotating principle described and advocated by Captain Koehler, supporting his idea by about the same arguments.

Several officers stationed at Fort Union used this bit and were in favor of it. It lacked the drop feature of the upper branch of the bit under discussion.

The cost of manufacture was regarded, I believe, as a fatal obstacle to its adoption for the cavalry service at that time, and the result was the form known as the Shoemaker bit discarded for the model 1892.

The latter has not been found to possess any advantages over the former, except that the branches are stronger and do not bend or break so frequently and is perhaps less severe. All the defects pointed out exist in a marked degree. I believe that the W. C. Johnson bit will obviate all of these defects.

The stiffening of the cheekpiece of the bit, by the construction shown, with the noseband, ought to assist greatly in keeping the mouthpiece in position. For appearance as well as weight this device should be as light as may be consistent with strength. The drop feature of the upper branch, allowing the curb chain to hang in the chin groove nearly at right angles would seem to give the full effect and obviate the pinching of the lips, so common, no matter what the width of our present bit.

The stud and its use is an important and desirable feature for reasons well understood. It seems to me that a bit on this principle is well adapted for a snaffle rein, fixing the rings for same on the cheekpiece branch at the ends of the mouthpiece. For training purposes the curb rein could be removed; either or both reins to be used as the trooper and horse progress in knowledge and accomplishments.

It would also seem that the watering bridle might be dispensed with; in garrison it is used but seldom nowadays for the purpose indicated by its name, and with the halter is an unsatisfactory substitute for the snaffle bit and bridle for training purposes. In the field it is an added burden and quite unnecessary.

It seems to be very generally acknowledged that a bridoon is essential for the high school training of horse and rider. If a snaffle rein, attached to this bit does not sufficiently fulfill the conditions, let us have the bridoon.

When our cavalry spent the greater part of the year on the march and less attention was given to training, the curb alone answered very well, but it does not satisfy the demands in connection with the higher training of man and horse for which our cavalry is striving to-day.

I would like to see a bit of the pattern described given a trial.

BRIGADIER-GENERAL H. T. ALLEN, PHILIPPINE CONSTABULARY.*

With the increase of our mounted strength, the present is a specially opportune moment to consider carefully our system of cavalry training.

Have we succeeded in making the most of the cavalry horse, considered purely from a military business point? If this be answered in the affirmative, then I should ask why each troop averages from two to four bolters, and why, annually, horses are condemned in almost every troop in the service for viciousness or unmanageableness, and why the period of usefulness of our horses is not greater. I maintain that with due care in purchase and training, there should never be a horse condemned for the second causes, and there should be few or no bolters.

It is not proposed to go back beyond the purchase, for I will assume that the officers detailed to make the purchase have a considerable supply of that *horse sense* which cannot be learned from books, and that their primary consideration should be to get horses with good *level* heads. What measure of success is attained I leave to others to judge.

My object in writing this is to call attention to a few glaring defects in our system, to a few things that should be apparent

* This article was written in February, 1901, and being pertinent, is inserted under this discussion.—[EDITOR.]

to people less clever than Yankees. There are exceptions in the cavalry service who are not included among the officers, directly or indirectly responsible for the conditions mentioned below, and who are, therefore, entitled to all the more consideration; but this list is a small one.

In the first place recruit horses, after regimental assignment, are turned over immediately to the various troop commanders. In some cases the new horses are assigned; in others they are allowed to be selected by men according to seniority; but in both cases they are sent out to regular drills at a very early stage. All of this is utterly at variance with *horse sense*, for it is a fact too well known to dilate upon, that the proper training of a horse is a slow process, requiring a great deal of time and practice. *The recruit horse is no more prepared on arrival for soldier work than the recruit man*, and it is equally as stupid to require it of the former as of the latter.

What is the remedy?

Simply establish recruit schools for horses on lines similar to that formerly in existence for cavalry recruits at Ft. Riley (under Captain Foltz, U. S. Cavalry) wherein all horses should have relatively as much time given them by experienced horsemen as was there allotted to green men. *Relatively* in this case, means that considerable more time is required for horses than for men. All this should be carried out at headquarters of home squadrons, at some regimental headquarters, or at distributing points.

In the second place our bridling is beyond question the most strikingly defective of any I have ever known adopted by any intelligent horseman, riding institution of repute, or civilized government possessing cavalry. This is a strong charge, but one for which I am willing to accept full responsibility. The time is past when we should close our eyes to these things; it is not just to ourselves, still less to the government we are serving.

To start with, all horses should be trained with two reins, even if the curb or snaffle alone be used subsequently, and all cavalry should at all times on duty be provided with two reins, for the simple reason that only about one horseman in one hundred can properly differentiate the mouth pressure with a single one. This is the result of many years' observation and experience, and this view has been corroborated by numerous horsemen of reputation. I freely confess that I am unable to properly *bit* the average horse with a single rein.

The alleged objection to double reins is the complication of the bridle. There is a little complication, it is true, but one that need in no way interfere with the proper working of the cavalryman's head or hands. It is not even necessary that the curb rein be always held in the hand, but it should at least be convenient where it can be readily taken up. The normal riding should be done on the snaffle. The curb rein should be so short that when dropped on the horse's neck it would dangle but little at the sides. Furthermore, all dangling even while riding on the snaffle alone, can be avoided by merely making a half twist of the curb rein and putting the snaffle rein through the loop. By riding normally on the snaffle, the curb becomes decidedly the more efficacious when used.

It is a well known fact that the worst bolters are often improved by a mild rubber-covered snaffle, and that many horses with hard mouths pull as vigorously on curb bits with long branches as with short branches.

One great desideratum in using two reins is to change the bearing surface in the horse's mouth, thereby preventing the ever-increasing pain due to continuous pressure on the same spots. It is obvious that the curb used alone will not accomplish this, and this fact in itself should suggest a change. At this very time a large percentage of our cavalry horses have sore or pinched lips, due to defects of our regulation curb bits, and practically every cavalry officer is cognizant of the fact and the cause. Why, then, should this matter not be taken up and regulated? The width of the curb strap and its relation to those parts of the branches above the bar (the upper sides) is such that a slight pull on the rein will cause the curb strap to pinch both lower lips between it and the bar, and therefore put the horse in pain almost as soon as he is mounted. A partial remedy for this is obtained by shortening the curb to that point where it will barely permit the bit to be put in the horse's mouth. A more effective method would be to attach the leather curb to steel curb-hooks provided for the average first-class curb bit, or by completely discarding the present curb and adopting the regular curb chain found on such bits. All this can be worked out by diagram, but if anyone has doubts about his ability to demonstrate it, let him get the necessary elements and make the empirical proof.

What bit or bits should be used?

A complete remedy of our present system then lies in the adoption of two reins that will bring into existence both curb

and snaffle action and therefore change of bit bearing in the horse's mouth. In spite of our present methods, our cavalry is in some respects superior to any other; but our bridling bears about the same relation to modern effective bridling that the Springfield does to Mauser. Yet there will be found defenders of it just as there are at this late day of the single loader.

Two successful bit systems are in vogue in all up to date cavalry (also in polo, steeple chasing, and hunting). Number one involves a bridle with an ordinary curb bit and snaffle, and is probably the more generally used. The snaffle necessitates at least an additional pair of cheek straps. Our present curb bit (with chain curb), our watering bridle, and an extra pair of reins would fairly satisfy the requirements in this case. Number two involves a bridle with a broken curb bit (sometimes called broken Polham) with two sets of rein rings. With the addition of a extra pair of reins this bit would meet all requirements when used with the leather of our present bridle.

The objections to number one are the increase of leather to the headstall and the additional bit in the horse's mouth. It has been claimed that number two has neither good curb nor good snaffle action. I can positively affirm, as will a number of good horsemen that I can name, that number one has both in a sufficiently high degree for any purposes of equitation and that it has certain advantages over number two; it prevents horses pulling more on one side of the mouth than the other, and since the branches come slightly together when the curb is used, horses cannot catch either branch with their lower lips or teeth. This latter fault can, however, be easily corrected in both bits by the addition of a small strap passing through a ring of the curb and being attached to each branch. A further improvement of number two would be to provide that the bar have a sliding movement on the two branches. For cavalry and all purposes my choice of bits is the broken Pelham.

Cavalry officers know better than any others the annual loss to the government by our present policy, and it is surely time that they as servers of the country use their utmost endeavors to prolong the service years of the stock intrusted to their care. In my opinion officers responsible for the use of green horses on regular service, oftentimes ridden by green soldiers, are removed but a small degree from infraction of certain articles of war.

Just as thoroughly as I am convinced of the common sense, business like necessity of a change, just so thoroughly am I persuaded that there will be officers who will contend that well enough ought to be left alone; that our cavalry has always stood high among the cavalries of the world; that troopers ought not to be bothered with two rings, etc.

How arrive at the standard of cavalry training?

This is an important question and one that must be largely dependent upon evolution, but at the same time a rational beginning should be made at once. The practical training of cavalry officers at West Point is entirely inadequate; an officer upon graduation there may be able to ride well, but in most cases he will have but a faint conception of the proper training of horses for first class cavalry purposes. How then are we to determine what shall be the proper training of cavalry horses if the officers themselves are largely incapable of imparting the necessary instruction? My answer is to establish a cavalry school for riding at some central station (Ft. Riley) and require a certain number of officers to attend it annually. Officers passing through West Point learn a certain seat, and some of them continue the rest of their lives to think that this seat is the only one for all kinds of work, whether it be in a charge over difficult country or on the march at a walk, whether in a McClellan or in a hunting saddle.

Besides the advantages occurring to the service by disillusioning and training such officers, this school of equitation would eventually become the cavalry standard. A few officers carefully selected for their horsemanship and horse sense, aided by certain non-commissioned officers, selected for similar qualifications, should be sent there as a beginning. Recruit horses should also be sent there for training, and as the student officers arrive they should be put to work under the instructors with the non-commissioned officers, beginning at the lowest range, and kept at the training of the groom mounts until the latter are sent to troops.

With a view to securing refinements and accomplishments of their profession, and for the purpose of inculcating daring and activity in their branch of service, these student officers should be required to play polo, ride steeple chases, follow hounds, and engage in various kinds of mounted sports—all of which would materially aid them in learning horsemanship in the broadest sense and, therefore, make better cavalry officers of them. *From this school, as a center, a correct standard of cavalry training and a true understanding*

of horsemanship, would eventually reach all grades of our mounted service.

The above will provoke sneers from a certain class of officers, nearly all of whom would make a sorry spectacle of themselves if put at difficult riding in company with really good riders. It is safe to say that fifty per cent. of such officers would frequently lose their stirrups, even in a McClellan, in taking a four foot fence; and that some of them would, in taking the same obstacle in an ordinary pig-skin, bite the dirt. I have known a cavalry officer of some reputation, to disapprovingly ask what were the advantages in knowing various kinds of riding, saying at the same time that he did not see that it would help him in delivering a charge. Following the same process of reasoning, he should have questioned the study of logarithms, calculus, and chemistry, to say nothing of subjects bearing still less upon charges and other cavalry work. That any young cavalryman should make such a contention, is sufficient proof that the matter merits immediate consideration. If young cavalry officers are content to admit superior horsemanship of any kind on the part of any class of gentlemen, and are satisfied solely with ordinary service riding, then the true spirit of horsemanship is wanting, or is so latent that a vigorous incitant is imperative. Can it be that we have reached that stage in our military existence where true horsemanship has ceased to make demands upon the time and earnest consideration of all officers—especially upon that class whose fundamental creed is based upon it?

EUROPEAN APPRECIATION OF AMERICAN CAVALRY.

REVIEW OF ARTICLE IN THE "REVUE DES DEUX MONDES" AND THE "BROAD ARROW."

BY LIEUTENANT ROLAND FORTESCUE, FOURTH CAVALRY.

OFFICERS of the mounted branch will be interested in two articles recently published abroad, containing complimentary references to the work of the American cavalry. These publications show that the operations of the Civil War are finally receiving from foreign critics the consideration and study they have always deserved. The first is an essay entitled "Cavalrymen and Dragoons," which appeared in the *Revue des Deux Mondes*, and is attributed to General Negriger, the well known French authority on military affairs. The second is Lord Robert's memorandum on the question of armament of cavalry.

General Negriger begins his article with an outline of the regulations governing the work of the French Cavalry since 1870, laying stress on the prejudice against fighting on foot in their service, summarizing the training of the French Cavalry as progressing along obsolete lines. He then goes into the history of mounted troops and their employment, bringing us down to the time of the Civil War. His ideas on the work of the cavalry in this struggle are as follows:

"What can be said, therefore, of cavalry attacks in 1870 led against troops armed with quick firing rifles and breech-loading guns? But it is not yet time to consider this question. First, it is necessary to examine how cavalry was employed by a nation free from prejudice and unhampered by 'wise' doctrines; that learned war by practice and the use of common sense. We are speaking of the War of Secession which brought together in conflict the Confederate forces of the Southern States and the Federal armies of the North.

X

This war opened a new field to the cavalry. The Americans, free from the fetters of routine which restrained the older armies of Europe, adopted the tactics best suited to their operations.

~~X~~ The forces of the North and those of the South found railroads to be absolutely essential to all their movements. Cavalry became the most redoubtable enemy of the locomotive, thus showing one of its most important uses in future wars. In Europe, however, this fact passed almost unnoticed. The different operations of the cavalry were confounded under the name of raids, implying the idea of great rides having for their principal end the destruction of the enemy's magazines.

It was professionally stated that these would find no application in a European war; therefore, they received but superficial study from a disdainful standpoint. This mistaken attitude was most serious, as certain of them could have been cited as models for similar operations in future wars.

20 54
160
160 "Among others may be mentioned the forces under Stuart, which belonged to the Army of Virginia under the orders of Lee, the commanding General of the Confederate forces. The terrain over which they operated resembles our country to the east. About 160 kilometers separates Richmond, held by the Confederates, from Washington, occupied by the Federals. This is almost the distance from Metz to Langres. The Confederate cavalrymen were armed with the saber, carbine and revolver. Their pack was in general very light; they did not overburden themselves except in preparing for an expedition of several day's duration, in which case they carried all the provisions possible on their saddles.

160
160 "The manner of conducting the marches merits special attention. Daily marches of from fifty to sixty kilometers, repeated for several days by forces of from 1,200 to 1,500 men, were common. When not in fear of the enemy they were conducted in the following manner: Ten kilometers at the walk and trot mounted; one hour. Four kilometers at the walk, dismounted; one hour. And in this manner for sixty kilometers. Thus the horses were only mounted one hour in two, and the average speed was seven kilometers an hour. Each detachment had its scouts. Most of them came from the Western States, where they had fought Indians, and were thus schooled for this dangerous service. They were in constant contact with the enemy, watching all his move-

ments. Ordinarily they crossed the outposts at night, passing the day in the woods or in the house of someone devoted to the Southern cause.

"The scouts were often in reconnaissance several days in advance of the main body. Again they were but a short distance ahead of their own troops. Stuart received their reports quickly and could take advantage of the opportunity as soon as it was thus made known to him. In general, the scouts did not have direct connection with the commander. This connection was maintained by means of messengers who correspond to the 'mounted orderlies' since organized in Germany. These were distributed as follows: To the Commanding General, sixty; Commanders of Army Corps, twelve; Division Commanders, six; and to Brigade Commanders, three.

"Actually all this cavalry was composed of dragoons. The regiments made constant use of dismounted action, but this did not prevent them from making charges with revolver or saber in hand, as at Fairfax, Rockville, and Hanover. But the carbine and cannon were most often employed. Often a whole brigade was dismounted for attack. If they had to retreat certain detachments would hold the enemy in check with their fire, thus permitting the greater part of the forces to get away.

"The details of several operations make these tactics more easily understood."

Here the author includes a detailed description of Stuart's operations around McClellan on the Chickahominy, which are already too well known to the American cavalryman to need repetition here. He continues as follows:

"It was thus that practical warfare compelled the Northern and the Southern cavalry to use the same battle tactics. These were so different from the tactics in vogue in European cavalry that they merit a knowledge of their details.

"The men were almost all excellent horsemen, accustomed from childhood to managing all kinds of horses. Nevertheless they soon learned to fight on foot on almost every occasion. Once in contact with the enemy, the cavalry groups covered the battle front by means of wing squadrons which moved in front of the center, sometimes operating mounted, but more often dismounted, deploying as skirmishers. At the same time the main body dismounted (one man

holding eight [?] horses) and formed line of attack. The skirmishers were three or four meters apart. When the ground offered sufficient cover, they generally deployed in one line, but on open ground they formed in two and sometimes in three lines, one behind the other with a greater or less distance according to circumstances.

"Arriving within range, the first line would lie down and commence firing. The second would run forward, cross the first and advance to points permitting of the most effective fire, lie down and open fire in turn; the advance was thus continued, the rear line passing through the intervals of the foremost skirmishers. Arriving within close range of the enemy they intermingled, forming a dense chain which charged and made use of the revolver at the last moment. It is interesting to observe that these dispositions were analogous to the ones used by Lord Roberts in South Africa in 1900.

WB X
"Over and over again General Sheridan made known his ideas on the employment of the cavalry of the future. The opinions of such a leader, who, during five years of war, gave such brilliant proofs of his ability must be given consideration and merit explanation. According to him, cavalry that is only efficacious mounted, is to-day valueless against well-trained infantry armed with quick-firing rifles. He would not admit his cavalry to fight mounted except in conflict with other mounted troops, and then only when there was not time to dismount. He thought that *l'arme blanche* had seen its day, and in the charge, and with more reason in the mêlée, the revolver alone was effective.

"This opinion is concurred in by a large number of American officers. They cite, among others, the following example: In 1864 a Federal troop being hurled against a body of Confederates of equal strength, the latter using the revolver only, in a mêlée of several minutes' duration killed twenty-four and wounded twelve.

"Sheridan hoped that the fire of cavalry troops might be made as destructive as that of infantry, in which case they could dominate the latter, even with fewer troops on the firing line, as their mobility would permit them to envelop the enemy and subject him to a converging fire. He believed all cavalry maneuvering, according to the European school, would be destroyed by the fire of his troops, who would also be capable of attacking railway junctions, etc., even when well guarded by infantry and protected by field works. He believed that cavalry, aided by horse artillery, would be able

to prevent the union of different elements of an army by attacking them in turn.

"On and after 1862 the manner in which the American armies kept themselves informed, is not less remarkable. This service was insured by scouts, the pick of volunteers, who were all young men, trained, untiring horsemen, and of proved bravery and intelligence. When these scouts operated in a friendly country they were often better informed of all that concerned the enemy than his own generals. When they found themselves in the midst of a hostile population, their information was naturally somewhat meager and less exact; but, thanks to their experience, they still performed this difficult service in a manner that was far beyond the ability of an average soldier. In short, this role so important, oftentimes even decisive, fulfilled by the cavalry of both parties during the five years of war, appears in all the operations. Their activity was unflagging. They scouted and attacked incessantly, and with the Federals, as well as the Confederates, it was the cavalry that finished the fighting. At the moment when Sheridan's cavalry barred the lines of Lee's retreat with their carbines and terminated the war, the cavalry of the latter, reduced to a handful of men, attempted a last stroke. Commanded by his nephew, Fitzhugh Lee, they threw themselves upon one of Sheridan's divisions, defeated it, and captured General Gregg, its chief."

Scouts

In the second part of his article the author discusses the Austro-Prussian War of 1866 and the Franco-Prussian War, showing how little attention had been paid by European nations to the cavalry lessons of the Civil War. He concludes with the opinion that dismounted fire action, as advocated by General Sheridan, is one of the most important attributes of cavalry. The whole paper is extremely complimentary to the American service.

Another article containing much commendation for the tactics of American cavalry, is a recent memorandum on the question of the armament of cavalry, issued by Lord Roberts. He takes up first the action of cavalry against cavalry, discussing the gradual diminution of the value of shock tactics and the increasing importance of fire action. Taking up the Franco-Prussian period, he writes as follows:

X

"The German cavalry indeed, did good work in reconnoitering during the first phase of the 1870 campaign; but the French cavalry never attempted to stop them, and in the latter phase when the French *franc-tireurs* formed a screen for the infantry columns in rear, the German cavalry found themselves so powerless that they were compelled to arm themselves with captured rifles. In America on the other hand, the cavalry leaders very early recognized the increase of power to be gained by arming their men with a rifle in addition to the saber. Their tactics against both cavalry and infantry were a combination of fire and shock, and their achievements were far more brilliant than those of the Germans in 1870. The cavalry was not only employed to capture and hold strategical positions, to cover flank marches, to delay wide turning movements, and to cut the communications in far reaching raids, but as rear guards and advance guards. Compared with the Germans, who made very little use of fire action, the Americans were far more independent, more dangerous in attack, and strategically, owing to their capacity for defense, distinctly more effective."

In taking up the question of pursuit by cavalry he continues as follows:

"Pursuit, when effective, has been carried out by fire, and the cavalry has endeavored to get ahead of the retreating infantry and guns to retard their progress and block their path with a strong line of rifles. It was by adopting these tactics that Sheridan's cavalry brought about the dispersal of Early's army in the Shenandoah in 1864, and the surrender of Lee's army at Appomattox in 1865. In the former series of operations the cavalry fought two pitched battles and drove the enemy back 130 miles in nine days (the 19th to 27th of September), capturing over thirty guns, 1500 to 1700 prisoners, and turning every position which the Confederates attempted to hold. The fighting was not all dismounted. During the battle of the 19th of September one division alone made six distinct charges—three against cavalry and three against infantry and artillery; but, as a rule, the firearm and the horse artillery gun were the decisive weapons. Such tactics, which the powerful armament and defensive strength of the American cavalry made possible, are infinitely more effective than charges in mass with *l'arme blanche*."

He concludes his argument in favor of dismounted fire action by describing American cavalry as being expert in a combination of shock tactics and dismounted fire action.

These articles tend to show that the operations of the American cavalry during the Civil War are at last receiving the attention they deserve, and our army as a whole is attracting considerably more attention than has been the case heretofore.

9/2/11

Comment and Criticism.

THE REVOLVER AND ITS HOLSTER.

BY CAPTAIN F. C. MARSHALL, FIFTEENTH CAVALRY.

The discussions on the Borchardt-Luger pistol, in the January number of the JOURNAL seems to indicate an almost universal dislike among cavalry officers to small caliber pistols. This has always been my view, and was never better illustrated than last week, here at Jolo.

Very recently occurred the first Feast of the Hadjis of this year (there are two each year), and a larger crop of fanatics than usual resulted. These fanatics are called by various names—juramentados, “rum-amucks,” madmen. Their idea is to die killing others. They are the absolute limit of desperate homicides. On the 8th of March, one of these juramentados started his bloody career in the cock-pit of Tullei, a small suburb of Jolo, in the height of its Sunday operations. His first victim was a Filipino, whom he killed, then a Chinaman, on whom he inflicted a frightful wound; then he cut a Moro, and another Moro. Then the barongs of the crowd around were out and his career closed. It was over in a very few seconds.

The second killing occurred on March 10th, two days later, when a party of engineer soldiers, with a guard of the Fifteenth Cavalry, was superintending the work of a party of native laborers in a stone quarry three miles from Jolo, near the seat of Datto Kalbi, one of the principal chiefs of the Jolo Moros. A trail much used by the Moros passing up and down the coast, passes near this quarry. About 9 o'clock

a single Moro came along this path. As soon as he appeared the guard and engineers jumped to their feet; they were awaiting the explosion of a blast, and the Moro yelled out, "Bagai," meaning "friend." Then he leveled his piece at the group and pulled the trigger. The weapon, an old percussion cap musket, missed fire. He threw it down, drew his barong, and jumped for the crowd. The guard fired at him; the engineers, who were unarmed, started to run. One man, a private of Company G, Corps of Engineers, stumbled on a log and fell. Before the Moro could reach him he had been hit twice—once in the groin and once over the heart—by revolver shots, but the witnesses say he did not slacken speed perceptibly, rushed at the fallen soldier and cut him dreadfully. The first blow cut down the soldier's back, cutting through all nine ribs on the left side of the backbone, through the lungs and to the breastbone; another took off his hand at the wrist; a third his leg below the knee; a fourth split his other hand to the wrist. By this time the Moro had seven wounds, and became *hors de combat*—and high time, too.

On the 12th came the third visitation. This time the Jolo market was the scene, at seven o'clock in the morning. Three Moros, with their barongs hidden under the folds of their sarongs, bearing loads of native produce to sell, entered the market, which, since the cholera scare, has been held in a cocoanut grove near the village of Jolo. On getting into the thick of the crowd they threw down their loads, drew their barongs and started. They killed three Moros, one East Indian, and wounded a Filipino and his Moro wife, before the crowd scattered. Captain Eltinge and Lieutenant Partridge, Fifteenth Cavalry, with a detachment of eleven men of Troop M of that regiment, were just leaving their stables for target practice. Hearing the commotion, they rushed to the market and were at once charged by the three Moros most desperately. Of course the cavalrymen being mounted, could easily keep out of the way and could shoot the men down at their leisure, but it was noticed that the stopping effect of the bullets was very small, and only when hit by bullets that entered the skull did the men stop their desperate attempt to get at the soldiers. The last

Moro to die, while on his knees, threw his barong at a mounted man, fully twenty feet away, striking him in the pit of the stomach with—most fortunately—the hilt.

Another thing noticed in these and other juramentado attacks at Jolo, is that the holsters are too small and the revolvers in consequence too hard to draw quickly. Nothing could be more rapid than the way a Moro gets into action. His barong or kris slips in or out of its scabbard like oil, it is nicely placed to his hand, and the swing of drawing it plunges it into his victim. To oppose such abnormal quickness the revolver should slip out readily too, and its bullet should be sufficiently heavy to stop the advance of the person receiving it, instead of merely inflicting a wound that is fatal only after bleeding to death or after peritonitis has set in.

I do not think that cavalry officers have laid sufficient stress on the defect I mention in the holster, in their reports. Every officer I have spoken to on the subject agrees with me that the defect is grave and should by all means be remedied.

The experiences of the past few years in the Philippines, where a fight is a touch and go; where the enemy makes his attack so viciously and his retreat so soon, fractions of seconds in getting into action mean, many times, valuable lives saved, and increased punishment inflicted on an enemy. In my own experience, both hands are usually necessary to get my revolver quickly out and ready. The holster should be deep and large, with the flap easily secured and easily opened—all of which our present holster is not. The revolver should carry a heavy bullet. That should be the first consideration.

THE BRIDLING OF OUR CAVALRY HORSES.

BY CAPTAIN HAMILTON S. HAWKINS, THIRTEENTH CAVALRY.

I submit this article to the readers of the CAVALRY JOURNAL, not for the purpose of telling all there is to tell or anything new about the bridling of saddle horses, but to call attention to some very glaring defects in our system, and to ask cavalry and light artillery officers for their coöperation in an effort to obtain an intelligent and reasonable change.

Many articles have been written on this subject by officers anxious for improvement, but they are generally read and tossed aside and never thought of again. I regard it as an officer's absolute duty to take our service journals and to read them, and when something that seems good is recommended by another officer of experience in the subject he writes of, to support him, if agreeing with him, by talking the thing up in his regiment or writing about it.

In the *Journal of the Military Service Institution* for May, 1901, there appeared an article "Concerning Cavalry Training," by Captain H. T. Allen, Sixth Cavalry, now Brigadier General of the Philippine Constabulary, and two articles in support of it by Colonel O. L. Hein, then Commandant of Cadets at West Point, and Colonel Charles G. Treat, the present Commandant. These three officers—all of them of ability and experience in horsemanship—agree that our system of bridling and bitting is defective. There are a great many other officers who entertain the same views, and if this be the sentiment of the service, we should make a determined effort to obtain the change we want.

Our system of bridling and bitting is, to say the least, decidedly faulty. If we ever expect to have our horses properly controlled we must adopt a double rein. When I joined the cavalry service as a youngster I was told that we still used the single rein because the double rein was too hard to handle; made too much leather in the bridle, and that our

soldiers could not learn to handle it in the time allowed. I accepted this, as any other youngster would, never doubting that my superiors were right. My experience in the West as a boy had taught me to ride with the single rein, and I regarded it as American, and therefore beyond criticism. There were several of us in my regiment whose eyes were opened only by indulging in polo. We gradually found out for ourselves that we could control our ponies better with a double rein than with the single; and if our ponies, why not our horses? I have used the double rein with a bit and bridoon ever since.

The double rein is not hard to handle and the recruit can learn to handle two pairs of reins as easily and quickly as he can one. Last spring at my troop drills I noticed that my horses were constantly tossing their heads and becoming more restless in ranks. They were new horses, and were gradually getting into the condition of all our old horses. Thereafter every man was required to use the watering bridle in conjunction with the curb bridle. It did not make a perfect double bridle, but it answered the purpose quite well. The men were taught to hold and use the reins properly in a very few days, and the result was most gratifying and convincing. I had tried the experiment before in the Philippines with the same results.

Every troop commander starts his recruits in their first lessons in riding with the watering bridle. He does not want to injure his horses' mouths by allowing the curb bit to be used by inexperienced hands. How much better, then, would it be to have all his men using the snaffle with a curb bit ready for use when required. The snaffle should be used habitually and the curb only when necessary. As soon as the horse responds to the pressure of the curb it should be relaxed and return made to the snaffle. With many horses, after some training, the curb need scarcely ever be used. Constant pain in the horse's mouth would be thus avoided and bolting would become of very rare occurrence.

It is all very well to argue that men can be taught to ride with a single rein without hurting the mouth, but they never are. In moving on the drill ground at a trot or slow gallop

perhaps it can be done, but in the rapid riding that cavalrymen are required to do, where horses are made to pull up suddenly or turn this way or that as in mounted combat or over rough country, a slight but constant pressure on the bit is absolutely necessary, and if a curb bit alone is used, not one man in a thousand can avoid causing pain. With the double rein this slight pressure, or "feeling the horse's mouth," can be made with the snaffle, and the curb held for an emergency. When the curb is used it will be much more effective.

It is hard to make a man who never rides out of a trot or lazy lope believe all this, but the man who plays polo or rides at steeple-chasing will soon find it out for himself.

One reason why our cavalry officers have not heretofore objected more to the single rein is, that in the field it seems to be less trouble, there is less leather about the headstall, and also in the field the horses are less nervous and not so hard to manage. After a few days' marching the nervous horses, being ridden at a walk with a loose rein, become quieter and being more or less fatigued are, in case rapid movements are necessary, more easily held in check. A single rein with a curb bit seems all that is necessary. But even though fatigued, when under excitement such as is incident to battle, the horses that were unruly in the post will be found unreliable and dangerous. Their mouths have been spoiled in garrison training, and the moment the old irritation returns they recommence their maddened resistance, and the trooper is not of much use as a fighting man. The horse must be trained in garrison to rapid movements under complete control in order that he may be reliable and useful in time of war. If he is used simply as a means of transportation along the road at a walk or slow trot these remarks do not apply.

The extra cheek pieces needed for the bit and bridoon could be dispensed with by using a single bit with two sets of rings for reins, such as the broken Pelham which is said to act well both as a curb and a snaffle. Personally I prefer two bits, but I have used the combination bit with success, and believe it would be better for our service. It makes it

easier to water horses on the march and the bridle can be put on more quickly. The curb reins could be fastened with a sliding loop, so that while marching the trooper would not be bothered by holding both pairs of reins all the time. When dismounting to fight on foot the curb reins should be left over the pommel of the saddle, the led horses led by the snaffle rein, and the link snapped into the halter ring from the ring of the snaffle bit. Less pulling back would result.

There remains but one objection to the double rein, to-wit: that more leather, enough to make the extra pair of reins, is necessary to complete the bridle. This objection is too small to consider.

Our curb bit is, as every cavalry officer knows, decidedly unsatisfactory. The upper branches are so short that the curb strap pinches the horse's lips and takes the skin off, and your horse is in constant torment. The remedy for this is self-evident.

Since we know the faults of our bridles and how to remedy them I do not see why we should remain indifferently silent. We cannot blame the Ordnance Department, for it is ever ready to make changes in our equipment when it knows what we want.

THE SABER.

BY CAPTAIN M. C. BUTLER, SEVENTH CAVALRY.

My object in writing this article is to ascertain, if possible, the sentiment among cavalry officers concerning the use of the saber in time of war; and this can be accomplished better by a discussion of the subject in the CAVALRY JOURNAL. I for one am in favor of restricting its use to garrison duty only. It looks well at parades and reviews, and as a physical exercise its use serves the purpose of strengthening the wrist and arm, but its effectiveness as a fighting arm hardly warrants its use in a campaign.

There are probably a number of officers who favor keeping the saber, and I am inclined to think they are somewhat controlled by sentiment. It is that dislike to part with something we are accustomed to, and which is distinctive with the cavalry. It cannot be denied that its care requires considerable time and attention on the part of the soldier. The question is, whether in a charge, which would occur probably at great intervals, if at all, the advantage gained from using the saber would compensate for the trouble and inconvenience to the soldier in taking care of it. I think not. Our service saber is heavy and considerable strength is necessary to handle it effectively. Even under favorable conditions with the present saber cavalrymen must be strong and an expert horseman and swordsman to put *hors de combat* an enemy.

The foreign *Military Review* tells us that the official medical statistics of the German Empire fixes the Germans killed and wounded during the war of 1870 at 65,160; out of this number only 212 were wounded and six killed by the saber. Now in November, 1864, in a single action between a squadron of Federal regulars and a squadron of Confederate partisans, the latter using only their revolvers, killed of the enemy in a mêlée of a few minutes twenty-four and wounded twelve. The revolver undoubtedly has a greater moral effect than the naked blade.

A French soldier, when asked how he managed to make such a journey on foot with safety when the country was overrun by German cavalry, replied that he had his gun, and that whenever a trooper made a show of approaching him he raised his gun and the trooper made off in another direction. The cavalryman armed with the saber confronted by one with a firearm, has a sensation akin to helplessness.

The advocates of the saber will claim that a soldier mounted will fire away his ammunition in a charge or mêlée before the result is decided, and thus be at the mercy of the man with the saber; and also the lives of his comrades will be endangered by his own fire. This would be true with a lot of green recruits, but with men well trained in the use of the revolver mounted, it would very likely not occur. If a

cavalryman knows that his life will depend on a judicious expenditure of his ammunition, he will be careful. An extra revolver would overcome the fault. General Forrest's troopers were soon convinced of the inefficiency of their sabers and replaced them with one or two extra revolvers.

General Frank Armstrong, who was with Forrest in many of his campaigns, says that the men of Forrest's command always charged with the revolver, and that they used them very efficiently. I venture to say that his men were not experts with the pistol on horseback before they saw service. Very few of Morgan's men were armed with sabers. What was accomplished during the Civil War with the pistol can be accomplished again in future wars. We should be allowed more time and ammunition in training our men and horses in pistol practice. It has been said that General Sheridan was convinced that in the charge as in the mêlée the pistol alone is efficacious.

If the saber is to be continued in use during war times, by all means let the scabbard be of wood, and thus avoid the clanking of metal and the glitter from the sun. Why are we compelled to take our sabers on a practice march? Not because they are of any use whatever, but because the regulations require it.

CAPTURE OF SAN MATEO.

111
BY LIEUTENANT-COLONEL JAMES PARKER, THIRTEENTH CAVALRY.

In the article on "The Cavalry in Southern Luzon," in the JOURNAL of April, 1903, occurs the following: "San Mateo had the distinction of being captured and abandoned as many times as Porac," from which it might be inferred that San Mateo had been captured and abandoned a number of times. I have seen similar statements in print before, especially one to the effect that "whenever a young officer wanted a little glory he would go out and take San Mateo."

As a matter of fact, previous to the time when General Lawton took San Mateo, in December, 1899, and in taking it was killed, San Mateo had been taken by the Americans but once, viz: on August 12, 1899, by a column of troops under my command, the other officers present being Captain Wilhelm, Lieutenants Spurgin and Weeks, Twenty-first Infantry; Lieutenants Howland and Van Duyne, Twenty fourth Infantry, and Lieutenants Boniface and Dudley, Fourth Cavalry, and acting Assistant Surgeon Coffin; total, nine officers and 280 men from the Fourth Cavalry, Twenty-first and Twenty-fourth Infantry.

San Mateo was an important town fourteen miles from Manila, lying on the insurgent line of communication between Northern and Southern Luzon. Its possession by the Americans would cut that line in two. Realizing this better than did the American commander, the insurgents placed at San Mateo one of their best regiments, the place being commanded by General Geronimo. It was not a place that could be entered at will, being defended on the south by two lines of intrenchments, one in front of the Ampit River, the other in front of the Canda River. Before August 12, 1899, American troops never got further than the first line of these intrenchments. On that date we took the place after four hours of the hardest kind of fighting, losing five men killed and one officer (Lieutenant Weeks) and fourteen men wounded. As I said in my report of August 12th: "The troops showed the greatest determination and valor, and it is to be deplored that a position taken at such a price should be abandoned." Nevertheless, it was abandoned the next day, by order of General Otis.

The notion that San Mateo had been taken before probably originated by confusing the outskirts of Mariquina with San Mateo. I think it is due the officers and men who did take it on the 12th of August, 1899, that this idea should be corrected.

9/7/11

Reprints and Translations.

RACING AND POLO IN THE ARMY.

[From the *Evening Post*, New York, March 18, 1908.]

To the Editor of the Evening Post:

SIR:—The following extract is from the correspondence from a prominent army post in a recent issue of one of the army papers:

"In the racing class events will be open in many instances to outside talent, and the purses offered will be of a sufficient amount to attract only the best. Although running events will be the feature in this class, it is the intention to have meets as nearly as possible after those of the Western circuit, and thus give the garrison and the vicinity, which has, of course, a great interest in the fort and its happenings, and relies upon it a great deal for advertisement, an opportunity to witness the work of fast trotters and pacers in harness. The racing of horses from the various organizations in the garrison will also be encouraged, the one having the winning horse to receive a trophy suitably inscribed.

"Polo bids fair to run a close second with the racing department in the light of popularity. Already quite a number of officers have very respectable strings of well trained polo ponies, and many additions to them are promised during the coming season. Application for admission to the American Polo Association has already been made, which membership will entitle the team that will be picked to play any of the leading polo clubs in the country."

While the plans described in the foregoing extract are confined to a small minority of cavalry officers, and while the scheme must not be taken too seriously, still it offers food for thought and careful consideration.

To many officers, even to some who consider themselves so progressive as to be often taunted with being radical, the development indicated by the above paragraph would seem detrimental to the service. That the monotony of garrison life may be alleviated, and that a healthy *esprit de corps* may be fostered and created by a reasonable attention to athletics, everyone knows. Baseball, football, fencing, track athletics, etc., are all sports calculated to do good, and to bring the officers and his men nearer together in common pursuits and interests. They have nothing of a demoralizing nature in them and their tendency is towards better physical development and increased contentment.

Not so, however, for racing and polo. Horse racing is a sport that depends a great deal for its popularity on the gambling that follows in its wake, and "meets as nearly as possible after those of the Western circuit" will not increase the contentment of the officers and their families, but will introduce into garrison life a feverish and undesir-

able element. The advantages claimed for horse racing and polo in the cavalry are that they foster love for the horse and tend to make officers better cavalrymen. There may be something in this, but there is no good that can be accomplished by the introduction of these sports which cannot be much better brought about by the introduction of systematic horse training and legitimate cross country riding, such as explained by Captain T. Bentley Mott in a recent article in the CAVALRY JOURNAL. A careful perusal of Captain Mott's excellent article in the January number of the JOURNAL is recommended to all who think that racing and polo are legitimate lines along which the surplus energy of young officers should develop.

X WB

The advantages claimed for these two sports are as stated above, and some of the apparent disadvantages will be noted below:

1. They can be indulged in only by the few officers who have money outside of their pay, and a new line of division, which has never existed in garrison life in our service, is made between the rich and the poor officer.

2. Racing arouses the gambling spirit at a time when there is little or no gambling in the army, and when the increased attention to military education and the introduction of a number of interesting military studies tend to absorb the energies of the younger officers.

3. The two sports consume a great deal of time and discourage military study. They have only the faintest connection with the duties of cavalry, and the energy put into them is largely misdirected, while the result will be a loss in efficiency and an increase of friction in garrison.

4. The respect felt for the service and for the simplicity of army life, and the earnestness with which officers have always done their duty, will be lessened, and in place of this there will grow up in the minds of the people a feeling of contempt for officers of the cavalry, who now have a reputation for strict devotion to duty and for sheer efficiency second to no corps in the army. This will have its influence in Congress, and will give an immense lever to those who wish to ridicule the service and to reduce the number of regiments.

5. The most serious and to some a convincing argument against the introduction of racing and polo into the cavalry, however, is this: They are sports whose whole tendency is to increase the artificial gulf between the officer and his men, which is made necessary by the requirements of military discipline. Baseball, football and similar sports tend to diminish this difference, and to unite all on a common plane, with common interests, but racing and polo are sports in which the average soldier can never in his wildest dream hope to participate, and which separate his interests from those of his officer and reduce him at once to the position of a mere groom.

No one wishes to contend that a limited amount of amateur polo playing among the officers of a garrison for local recreation is not useful and all right, but the spectacle of the six-foot cavalry officer, weighing a good hundred-and-seventy-five-pounds, attempting to become an expert on a shaggy-tailed sheep of an Indian pony, bought from a neighboring cowboy, and to vie with men who spend many months of each year practicing the game, and who own half-a-dozen specially raised or

specially imported ponies that are worth from \$300 to \$3,000 each, all must admit is a sorry one.

How many of our cavalry officers now own one good first-class well-trained cavalry horse? The remarks of Captain Mott on this point are very telling, and certainly before we branch out into a game which, however fascinating, is *par excellence* the game of an idle and rich man, we should try to own at least one good horse well trained for our legitimate work and duties. The government is for the first time making liberal provision for the transportation of the private horses officers are required to own, and it seems that the surplus energy and money, if any, in the cavalry should go in this direction, at least until we are beyond reasonable criticism, before we branch out into more ambitious lines but faintly connected with our duty.

It is thought that no army but the English encourage and practices racing and polo, and it is certain that in our army, with the constantly changing enlisted personnel, the legitimate work of the officer in training himself, his men, and horses, will leave him little or no time for such amusements.

In this connection, the report to Parliament of the committee appointed to consider the education and training of officers of the English army (which any one can buy by sending to P. S. King & Son, Gt. Smith Street, Westminster, London, a money order for 1s. 7d.) is most interesting. Among the conclusions of this able committee we find the following:

"It has been stated by a number of competent witnesses that there is no possibility, under existing circumstances, of exacting a high standard of education from candidates for cavalry commissions. In fact, the supply not being equal to the demand, the military authorities have been compelled to accept almost any candidate."

After stating the necessity for educated and trained officers in the cavalry, the report continues:

"The main thing that is now necessary is that the cavalry candidate should have a private income of not less than from \$2,000 to \$3,500 a year. Our cavalry must be officered. We may require from the candidate either money or brains; the supply is most unlikely to meet the demand, if we endeavor to exact both."

Among other recommendations of the above committee in this connection are the prohibition of polo tournaments and the abolition of the practice of keeping regimental hounds and regimental coaches.

Nothing could have expressed what seems to many officers our correct position better than the answer given by one of the officers sent by the German Emperor to the centennial celebration at West Point last year, who, when asked, "Do you play polo in the German army?" replied: "No; for two reasons—we have not the time; we have not the money."

ARMY.

ARMY STAFF PROBLEMS.

[From the *Evening Post*, New York, April 2, 1908.]

91/11

It is full two years ago that the system of line and staff details was established in the army by act of Congress. Up to that time staff officers—paymasters, quartermasters, commissaries, adjutants general, ordnance officers and inspectors general—were men selected from civil life, or from the line of the army, who served permanently in the corps to which they were appointed. The Spanish War having brought out the grave evils which resulted from this permanent divorce of the men who did the fighting and those who kept them supplied, Congress decreed that after February 2, 1901, officers should be transferred to the staff for four years only, and should then return to duty with troops for at least two years, in order to prevent their becoming mere bureau officers, without experience of the needs of soldiers. In the period that has elapsed, the new system has been an unqualified success in the Adjutant General's Department, and in the Inspector General's, and so far as the army is concerned, in the Quartermaster's and Commissary Departments.

Yet the present head of the Pay Department, the Commissary General, and the Chief Signal Officer, who have grown gray under the old system, have recently entered protests against the workings of the four-year details. The Paymaster General, for instance, finds great difficulty in getting the line officers, of whom he has six, to conform to the requirements of his bureau. The chiefs of the other bureaus have not stated their complaints specifically as yet, but are content to have their belief known that before the first four-year detail period is over, "the demonstration of the failure of the system will be conclusive." There can be no doubt that in their minds the wish is father to the thought. The staff and line transfer act dealt a fatal blow to the prestige of the staff, previously the all-important part of the army. As the permanent officers go on the retired list the disappearance of the staff prestige is very marked, and with it goes that considerable political power which was the ruling influence in army politics until the incumbency of Secretary Root.

It may be that Paymaster General Bates' six line officers have had some difficulty in mastering the intricate and often old-fashioned methods for which the Pay Department has long been famous. But even if this is so, it cannot affect the reform at issue, which has unquestionably worked well in the other departments. It will take a much longer period than two years, and the failure of more than six officers to impugn the admirable principle which underlies the new system. And if it should really be impossible to simplify the pay methods so as to bring them within the comprehension of the average officer, it would still be feasible to instruct line candidates at Washington, West Point, or a post-graduate school before turning them over to the complexities and dangers of General Bates' red tape.

A more serious consideration is the fact that there seems to be some difficulty in getting officers to accept staff positions. Before the war with Spain there were hundreds of candidates for every staff position; at present the chances of active service in the line are more attractive.

The Ordnance Corps, for instance, needs sixteen lieutenants, and the Signal Corps eleven. But the latter's needs have only just become known, and vacancies in the Quartermaster's Department, the Commissary-General's, the Adjutant-General's, and the Inspector-General's do not go begging. The trouble with the Ordnance Corps is that the work is so extremely technical that by no means every graduate of West Point is fitted for it. Moreover, nine-tenths of the lieutenants of the line are untrained civilians or former volunteers without even a comprehensive knowledge of purely military duties. This was well illustrated by the failure of half the student officers at Fort Leavenworth in their recent mid-year examinations. Every ambitious lieutenant is just at present bent on developing himself as a line officer, and few have time to give any thought to preparation for more technical work. But these are conditions growing out of the enlargement and reorganization of the army which are certain to pass away, thanks to Secretary Root's barrack and service schools. And as they disappear, the Secretary's wisdom in bringing about the staff and line transfer will be more and more evident.

But the discussion has brought out again the need of further staff legislation. The preposterous state of affairs still obtains by which the quartermaster supplies the table at which the soldier eats, the commissary the food which he eats, the ordnance officer the utensils he uses, while the paymaster gives him his clothing allowances. Until this can be done away with, Secretary Root's reforms will not be complete. Last year he had introduced a bill consolidating the supply departments into one bureau known as the Quartermaster's Department, subdivided into a supply and construction division, a commissary division, a finance division and a transportation division. The plan was by no means a perfect one. Yet it represented a vast advance over present conditions, under which, as illustrated every day during the Spanish War, the heads of departments carry on their business without the slightest information as to what is being done in the adjoining offices. The bill was held up largely by staff influence, and was not pushed during the session just ended because of other important legislation. It is safe to say that Secretary Root will return to the subject with, it is to be hoped, an even more drastic consolidation measure. The only proper system is the navy's, in which the paymasters do all the work of the army quartermasters, commissaries, pay officers, and part of that of the Ordnance Corps.

9/2/11

FROM THE U. S. MILITARY ACADEMY, APRIL, 1903.

This list of military works is taken from one prepared by Colonel Arthur L. Wagner, Assistant Adjutant General U. S. Army, and is intended as an aid to Cadets, who, after graduation, may desire to accumulate a useful military library without an unnecessary expenditure of time and money. As Colonel Wagner states, the list is not a bibliography of the wars and other subjects considered, but has for its object the naming of a limited number of works which are known to possess military value and interest, combined with moderate cost. Where

several books on the same subjects are mentioned, the one to which preference is given is printed in small capital letters.

The text-books in use by Cadets are not included in the list, as Cadets have them, and should value and keep them.

Books marked with an asterisk are out of print, but second-hand copies can often be obtained.

MILITARY HISTORY.

Books treating of campaigns anterior to the time of Frederick the Great are not mentioned, as a sufficient knowledge of them can be obtained from general reading.

THE WARS OF FREDERICK THE GREAT.

Blackenbury's **FREDERICK THE GREAT**. A concise and excellent military history of the campaigns of Frederick.

Carlyle's **History of Frederick the Great**. A great standard work, which contains a very elaborate description of Frederick's campaigns and battles. The work is, however, unnecessarily voluminous for the student who desires merely to acquaint himself with Frederick's military life and achievements.

THE NAPOLEONIC ERA.

JOMINI'S LIFE OF NAPOLEON. A standard work of recognized value. Theres' **History of the French Revolution**, and **History of the Consulate and Empire**. Interesting and valuable, but voluminous and costly. **Ségur's History of Napoleon's Expedition to Russia**. A standard work, but not free from inaccuracies.

NAPIER'S HISTORY OF THE PENINSULAR WAR. The best military history ever written. It should be in every officer's library.

Ropes' HISTORY OF THE WATERLOO CAMPAIGN. This book renders all other histories of the Waterloo Campaign superfluous.

Memories of Baron de Marbot. An extremely interesting work which throws much light upon the military methods and life in the armies of Napoleon. A valuable military book.

Napoleon Bonaparte's First Campaign.

The Marengo Campaign.

These two volumes, by Sargent, are worth careful perusal.

THE CRIMEAN WAR.

THE WAR IN THE CRIMEA, by Hamley. An excellent work, concise and accurate.

Kinglake's History of the Crimean War. The standard English history, but prolix.

THE ITALIAN WAR OF 1859.

Précis de la Campagne de 1859 en Italie. A good book. No English history of this war in print.

THE AUSTRO-PRUSSIAN WAR.

***The Campaign of 1866 in Germany—the Prussian Official Account**. The most complete account of the war between Austria and Prussia.

***Hozier's "Seven Weeks' War."** An excellent work.

§**The Campaign of Königgrätz**. A study of the Austro-Prussian Conflict in light of the American Civil War.

§New edition published by Hudson-Kimberly Publishing Co., Kansas City.

THE FRANCO-GERMAN WAR.

- *The German Official Account. A voluminous and costly work. It is the standard work on which all other histories of this war must necessarily be mainly founded.
- *Borbstdt's HISTORY OF THE FRANCO-GERMAN WAR. An excellent work, but it ends with the fall of Strasburg and the annihilation of the French regular armies.
- The Franco-German War, by Von Moltke. A brief history, good in the original, but the English translation contains a number of minor inaccuracies.

THE RUSSO-TURKISH WAR.

Greene's Russian Campaign in Turkey. An excellent work.

EARLY AMERICAN WARS.

- Parkman's Montcalm and Wolfe. A deeply interesting history of the "Old French War."
- Fiske's History of the American Revolution. An excellent work.
- Lossing's Field Book of the War of 1812. A large work, somewhat discursive, but containing much valuable historical information.
- An excellent account of the War of 1812 can be found in Adams' "History of the United States, from 1801 to 1817," and McMaster's "History of the People of the United States."

THE MEXICAN WAR.

- Wilcox's HISTORY OF THE MEXICAN WAR. Probably the most impartial history of this war published.
- Howard's Life of Zachary Taylor.
- Wright's Life of Winfield Scott. These two biographies are highly commended.

THE WAR OF SECESSION.

BATTLES AND LEADERS OF THE CIVIL WAR. The articles in this work vary in merit from excellent to indifferent. On the whole, it is probably the best history of the war yet written, and it has the merit of presenting both sides of the story. The edition here recommended is the *unabridged* edition published by the Century Company.

The "Scribner Series." The following works in this series are specially recommended: The Peninsula. The Army Under Pope. Atlanta. The March to the Sea, Franklin and Nashville. The Virginia Campaign of 1864-65. The last named volume is of great merit.

Memoirs of U. S. Grant.
 Memoirs of W. T. Sherman.
 Johnston's Narrative.
 Memoirs of P. H. Sheridan.
 From Manassas to Appomattox, by Longstreet.
 Forty-six Years in the Army, by Schofield.

The Story of the Civil War, by Ropes. A work of the highest merit. Every officer should have it in his library.

Colonel Henderson's "Stonewall Jackson."

THE CHINO-JAPANESE WAR OF 1894.

The China-Japan War, by Vladimir. Scribners.

THE SPANISH-AMERICAN WAR.

Lodge's History of the War with Spain. An ably written book, but produced almost contemporaneously with the events which it describes, and consequently not free from inaccuracies.

The "Fight for Santiago," by Stephen Bonsall. A readable narrative, but the military criticisms are of little value.

"In Cuba with Shafter," by Miley. A concise narrative, supposed to reflect to a considerable degree the views of General Shafter.

The Cuban and Porto Rican Campaigns, by Richard Harding Davis.

Battles and Capitulation of Santiago de Cuba, by Lieutenant Jose Muller y Tejero.

No good history of the Spanish-American War has yet appeared. The above mentioned works are, however, interesting, though not free from the defects of contemporaneous history.

MINOR WARS.

*Sprague's History of the Florida War.

Malleson's History of the Indian Mutiny of 1857 (The "Sepoy War").

Forbes' History of the Afghan Wars.

"War Path and Bivouac, or the Conquest of the Sioux," by Finerty.

While this book scarcely rises to the dignity of history, it gives a readable and reliable account of the Sioux War of 1876-77.

Narrative of the Field Operations Connected with the Zulu War of 1879.

Carter's "Narrative of the Boer War." (The First Boer War.)

Maurice's "Military History of the Campaign of 1882 in Egypt."

History of the Soudan Campaign. Colville.

THE CHINESE CAMPAIGN OF 1900.

China and the Allies, by Landor.

"Reports on Military Operations in South Africa and China," published by the Military Information Division, Adjutant General's Office. X

THE BOER WAR.

The Great Boer War, by Conan Doyle. Well written, apparently quite accurate, and in the main a good *military* book. X

"Reports on Military Operations in South Africa and China," published by the Military Information Division, Adjutant General's Office. X

The Second Boer War, by Wisser.

WORKS COVERING SEVERAL HISTORICAL EPOCHS.

Annals of the Wars of the Eighteenth and Nineteenth Centuries, by Cust. This work includes the campaigns of Marlborough, Frederick the Great and Napoleon, besides giving a good account of the "Old French War," the Revolution and the War of 1812. It is a valuable work, and can be purchased at a very reasonable price.

VARIOUS WORKS PERTAINING TO THE ART OF WAR.

The Nation in Arms, by Von der Goltz. The best book on the art of war ever written. X

Hohenlohe's Letters on Infantry. Hohenlohe's Letters on Cavalry. Hohenlohe's Letters on Artillery. These letters are based on the experience of the writer in actual war, and are universally regarded as works of great value.

Fortification, by Major G. S. Clarke, R. E. An excellent work on the past achievements, recent development, and future progress of the art of fortification.

The Soldier's Pocket Book, by Wolseley. A valuable manual for field service.

Furse's Military Transport. Furse's Lines of Communication. These two books are important works on the subject of logistics and supply.

Notes on the Supply of an Army. Translated by Captain H. T. Kendall and Lieutenant-Colonel H. G. Sharpe.

The Duties of the General Staff, by Bronsart von Shellendorf. A tedious but extremely valuable work.

Clausewitz "On War." A military classic. A philosophical discussion of the nature and theory of war, and an able treatise on strategy and tactics. Although the tactical part of this work is completely out of date, the other portions of the book are still of great value, and "Clausewitz" should be in the library of every officer who desires to be well up in his profession.

Derrécaix's "Modern War." A good work, which covers much the same ground as Hamley, but in a different manner and with many different illustrations.

Hamley's Operations of War.

† Jomini's Art of War. A standard work, in which, however, the tactical portion is entirely out of date. The work is somewhat pedantic, but is replete with historical illustrations, and is worthy of a place in any military library.

✗ Conduct of a Contact Squadron, by De Biensan. An interesting and valuable tactical study.

✗ Studies in Troop-leading, by Verdy du Vernoise. A valuable work.

The Armies of To-day. A series of popular sketches, by Merritt, Wolseley, Exner, Lewal, and others, which appeared originally in *Harper's Magazine*. Though intended especially for the general reader, this book is not without considerable value to the military student.

† Birney's Gunmaking.

† Mackinlay's Gunnery.

† Walke's Lectures on Explosives.

† Abbot's Defense of the Seacoast of the United States.

† Abbot's Notes on Electricity.

§ Cavalry Studies from Two Great Wars, comprising the French Cavalry in 1870, by Lieutenant-Colonel Bonie (French Army). The German Cavalry in the Battle of Vionville—Mars-in-Tour, by Major Kaehler (German General Staff). The Operations of the Cavalry in the Gettysburg Campaign, by Lieutenant-Colonel George B. Davis, U. S. A. Illustrated. \$1.50.

§ Tactical Studies on the Battles Around Plevna. By Thilo von Trotha, Captain of the Grenadier Regiment Frederic William IV. (Attached). \$1.50.

§ Inquiries into the Tactics of the Future. Developed from 'Modern Military History' by Fritz Hoenig. Translated from the Fourth German Edition by Carl Reichmann, First Lieutenant Ninth Infantry. 420 pages. \$2.00.

§ Military Map-Reading, Field, Outpost and Road Sketching, by Captain W. D. Beach, Instructor in Military Topography at the U. S. Infantry and Cavalry School. 124 pages, full cloth, 75c. A useful book for instructing Non-Commissioned Officers.

† Reprint published by Hudson-Kimberly Publishing Co., Kansas City, Mo.

§ Published by Hudson-Kimberly Publishing Co., Kansas City, Mo.

✗ The books marked with a dagger are officially recommended by the War Department.

§ The Conduct of War. By Lieutenant General von der Goltz, Prussian Army. \$2.00.

§ Military Topography and Sketching, a Revised Edition, prepared for the Use of the Department of Engineering, United States Infantry and Cavalry School of Fort Leavenworth, by Lieutenant Edwin A. Root. \$2.50.

As before stated, there is no attempt made here to give a complete bibliography of works suitable for a military library. This list could be increased ten-fold without adding a single unworthy book. It is purposely limited to a few books most of which are of moderate cost.

A good, practical military library of about thirty-six volumes, selected as follows from the above mentioned works, could be obtained for considerably less than one hundred dollars. The books in the following list are all in print, with the possible exception of the first:

Brackenbury's Frederick the Great. (G. P. Putnam's Sons, New York.)

Jomini's List of Napoleon. (Hudson-Kimberly Pub. Co., Kansas City.)

Napier's Peninsular War. (Same.)

Rope's History of the Waterloo Campaign. (Putnam.)

The War in the Crimea, by Hamley. (Seeley & Co., London.)

Précis de la Campagne de 1859 en Italie. (C. Muquart, Brussels.)

The Campaign of Königgrätz. (Hudson-Kimberly Pub. Co.)

The Franco-German War, by Von Moltke. (Harper's, New York.)

Greene's Russian Campaigns in Turkey. (W. H. Allen & Co., London.)

Fiske's American Revolution. (Houghton, Mifflin & Co., Boston.)

Lossing's Field Book of the War of 1812. (Harper's, N. Y.)

Howard's Life of Zachary Taylor. (Appleton, N. Y.)

Wright's Life of Winfield Scott. (Appleton, N. Y.)

Battles and Leaders of the Civil War. (The Century Co.)

The Cuban and Porto Rican Campaigns, by Davis. (Scribner's.)

The Great Boer War, by Conan Doyle. (McClure, Phillips & Co., New York.)

The Nation in Arms. (W. H. Allen & Co., London.)

Hohenlohe's Letters on Infantry, Cavalry and Artillery. (Edward Stanford, London.)

Furse's Military Transport. (Allen, London.)

Notes on the Supply of an Army. (Hudson-Kimberly Pub. Co.)

Hamley's Operations of War. (Blackwood, Edinburgh.)

Cavalry Studies from Two Great Wars. (Hudson-Kimberly Pub. Co.)

Root's Military Topography and Sketching. (Same.)

§ Published by Hudson-Kimberly Publishing Co., Kansas City, Mo.

HOLSTER FOR FIREARMS.

SPECIFICATION FORMING PART OF LETTERS PATENT NO. 726,824, DATED APRIL 28, 1903. APPLICATION FILED SEPTEMBER 25, 1901. SERIAL NO. 76,589.

Reported By H. B. WILSON & Co., Patent Attorneys, Washington, D. C.

This invention is adapted for pistols, revolvers, magazine-guns, and other firearms.

An object of this invention is to provide a simple and inexpensive holster, which will securely hold the firearm ready for instant use, and will in the simplest way guard against marring the firearm while the same is being inserted into or withdrawn from the holster.

Another object is to increase the ease of returning the firearm to its holster.

A further object of this invention is to prevent the accidental cocking of the firearm and any consequent accidental discharge of the same while in the holster.

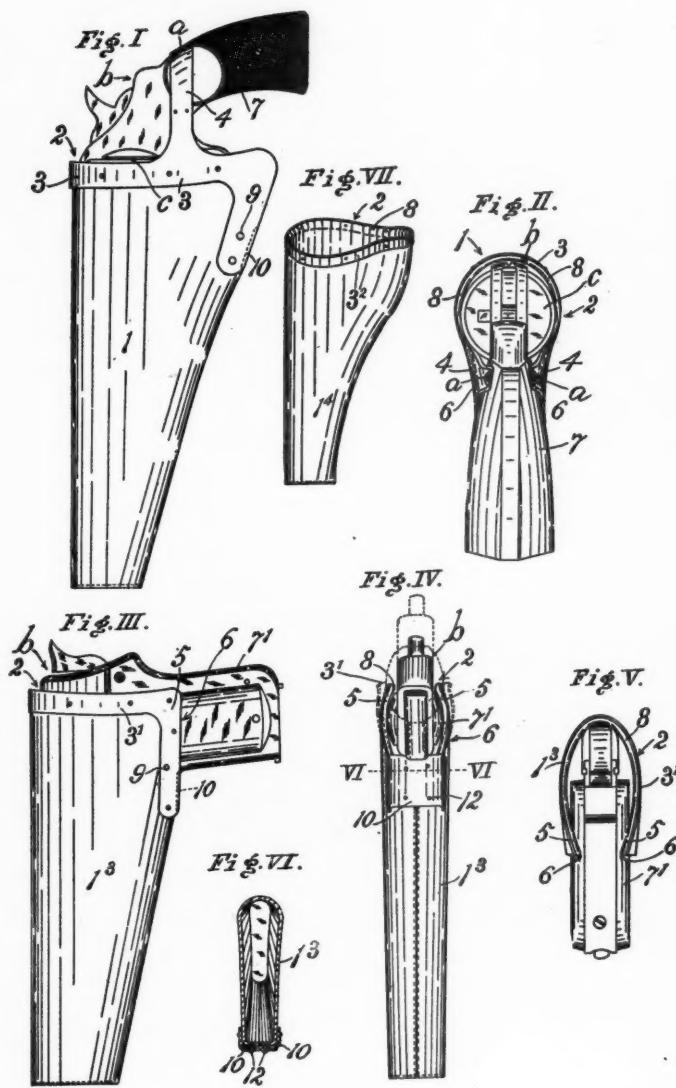
The invention is to be applied in different ways for different kinds of firearms. In some instances it is sufficient for practical use to provide the holster with a resilient mouth into which the firearm will wedge when fully inserted, thus to be held against accidental withdrawal, and said resilient mouth may be constructed and arranged to impinge upon the cylinder of the firearm to prevent its rotation. In other instances the holster is furnished with engaging means to clasp the handle of the firearm and in other instances engaging means may be arranged to clasp both the body and the handle of the firearm.

In carrying out this invention I apply to the open larger end or mouth of the holster a resilient band, preferably of spring steel, which at one and the same time forms a means for pressing inward the edge of the holster and also protects the edges of the opening from being frayed or otherwise injured from contact with external objects. Thus by a two-part construction the desired security against displacement and marring of the firearm and against injury to the mouth of the holster are secured. Furthermore, by this construction any projecting parts inside of the body of the holster which might interfere with the insertion of the firearm may be wholly avoided, and it becomes an easy and simple matter to give a tapering form to the opening into the holster by simply cutting away in a sloping manner the inner upper edge of the leather piece which forms the body of the holster.

It is to be noted that a special object of this invention is to provide in the simplest manner, and with the least expense, a holster which is superior to those heretofore made, in that the firearm may be more readily and conveniently placed in the holster and when so placed will be firmly held against accidental displacement or discharge.

In the accompanying drawings I have illustrated some of the forms in which this invention is to be applied.

Figure I is a side elevation of a holster having at its mouth engaging means which clasps both the body and the handle of a firearm that is shown inserted in the holster. Fig. II, is a view of the open end of



the holster shown in Fig. I with the firearm inserted. Fig. III is a side elevational view of a holster for an automatic firearm, one form whereof being shown in the holster. Fig. IV is a view of the same from the right of Fig. III. Dotted lines indicate the position of parts at the moment of withdrawing the firearm. Fig. V is a view of the same looking down. Fig. VI is a sectional view on line VI VI, Fig. IV, Fig. VII is a view of another form of holster embodying my invention; 1 indicates the holster; 2 indicates the mouth of the same; 3, a preferably resilient mouthpiece. The holster may be of different forms, as indicated at 1, 1¹, 1², and may be provided, respectively, with different forms of mouthpiece, as indicated at 3, 3', 3² in Figs. I, III, and VII, respectively.

In Figs. I and II, 4 indicates desirably resilient tongues extending longitudinally from the mouthpiece 3 and forming intermediate clamping extensions or jaws to clasp or frictionally engage the handle 7 of the firearm *b*, which enters between said tongues. These resilient tongues may be dispensed with in some instances, and the pressure of the mouth of the holster upon the cylinder *c* or other portion of the firearm will be depended upon to retain the firearm in the holster.

In Figs. III, VI, and V, 5 indicates resilient members, being end extensions of the mouthpiece, extending on opposite sides of an edge opening 6 to admit the handle 7' of the firearm. Said members 5 approach each other at the upper ends and bulge away from each other below the tops and are adapted and arranged to press upon said handle to prevent its withdrawal, except upon the exertion of considerable force. The force required will depend upon the force exerted by the resilient members.

The extensions or tongues 4 may have outwardly-deflected extremities *a* to facilitate the introduction of the firearm.

In Fig. VII, 3² indicates a form of mouthpiece which extends entirely around the mouth of the holster, approximately in one plane, to cause the holster to frictionally engage the firearm when secured therein to prevent the accidental disengagement of the firearm.

In practical use the firearm will be inserted into the holster in the usual way and will there be held by the retaining means at the mouth of the holster until considerable force is applied to withdraw it. The mouth is preferably outwardly flaring and inwardly tapering, as indicated at 8 in Figs. II, IV, V, and VII, in order that the firearm may be readily inserted.

The mouthpiece 3' (shown in Figs. III, IV and V) is of U shape viewed at the edge of the holster and preferably forms a protecting marginal binding extending around the firearm and opening 6 of the holster. The mouthpiece of the holster is secured to the body of the holster by any suitable means, as indicated by the rivets 9.

The resilient mouthpiece may be formed of a single resilient plate or band of metal approximately conformed to and secured around the edge of the open end of the holster and furnished with two overlapping end extensions 10, which lap upon each other across below the lower end of the edge opening 6 of the holster, being secured together

with rivets 12, that may or may not extend through the material of the holster.

In practical use the handle of the firearm will protrude to be grasped by the user, and the act of withdrawing and inserting the firearm is performed by the user without any manipulation of the clasp or holster just the same as with an ordinary holster; but when inserted the firearm is securely held from any accidental displacement.

The mouthpiece members 3, 3', and 3² extends substantially around the margins of the open end or mouth of the holster and form a support for the body 1 of the holster at the mouth thereof to hold the same in form and hold the same against the firearm for the purpose set forth.

The resilient members 3, 3', 3², shown in the different views, positively hold the mouth of the holster ready to receive the firearm, and the acts of inserting the firearm into the holster and withdrawing it therefrom are accomplished with greater ease, and with less care and attention and with greater certainty than possible with holsters heretofore known.

By the external arrangement of the resilient means, bands, or members 3, 3' and 3² for pressing the mouth of the holster inward, a double purpose is accomplished, viz: There is no danger of marring the firearm by contact with such means in the act of inserting and withdrawing the firearm, and the margin of the holster-mouth is protected against injury from any object striking against the outside thereof. This latter advantage is emphasized by the fact that the members 3, 3' and 3² are most desirably made of spring steel, which by my arrangement serves admirably for protecting the mouth margin of the holster and will not come in contact with the firearm while the same is being inserted or withdrawn.

RECORD OF ENGAGEMENTS WITH HOSTILE INDIANS IN THE DIVISION OF THE MISSOURI FROM 1868 TO 1882.*

INTRODUCTORY.

The information contained in the following synopsis of engagements with hostile Indians is compiled from official reports and returns. Whilst it was impossible to ascertain the exact losses of the troops engaged, the figures relating to those of the Indians necessarily represent the minimum. Excepting in rare instances when troops were in superior force and succeeded in effecting a complete surprise, defeat or a capture of a body of Indians, the latter, according to their custom, bore off in the midst of the engagements their dead and wounded, the number of whom could not, therefore, be ascertained; so the seeming disparity between the reported numbers of their killed and of their wounded, is accounted for by this great difficulty in ascertaining the extent of the latter. In many engagements, consequently, no mention is made of Indians wounded, although, doubtless, many really died from the effects of the wounds received. Notably such was the case in the battle of the Little Big Horn, in Montana, in 1876, and it was only when the hostiles had finally surrendered, that interviews with the Indians resulted in their admitting a loss of about forty warriors killed. The boastful nature of the Indian, too, leads him to exalt his own deeds of prowess, but to conceal his losses, so that whilst he makes an exaggerated record of the number of enemies he has slain, keeping his score by notches cut upon his "coup stick," he is reluctant to admit the extent of his own punishment.

Again, in the casualties to the troops, there were repeated instances of officers and soldiers reported wounded, who died later from the effects of the injuries received; whilst the number who were actually disabled for life, or entirely incapacitated for further military service, from the results of exposure and hardships involved by campaigns in pitiless winter weather in the heart of the Indian country, far from shelter and supplies, will doubtless exceed the killed and wounded upon the field of battle.

THE MILITARY DIVISION OF THE MISSOURI.

The Military Division of the Missouri was established January 30, 1865, by General Orders, No. 11, War Department, series of 1865. It then included the Department of the Missouri and of the Northwest, with headquarters at Saint Louis, Mo. March 21, 1865, by General Orders, 44, series of 1865, from the War Department, the Department of Arkansas and the Indian Territory were transferred to it from the

*This information was compiled at Headquarters Military Division of the Missouri in 1882 and published in that year. The pamphlet is out of print and few copies are extant, and this seems sufficient excuse for reprinting in the CAVALRY JOURNAL.

Division of the West Mississippi. June 27, 1865, by General Orders, 118, series of 1865, from the War Department, the Division of the Missouri was merged into the Division of the Mississippi, embracing the Departments of the Ohio, of the Missouri, and of Arkansas; headquarters at Saint Louis. August 6, 1866, the name of the division was changed to "Military Division of the Missouri," comprising the departments of the Arkansas, the Missouri, the Platte, and a new department to be created, Dakota.

The State of Arkansas was taken from the division March 11, 1867, by General Orders, 10, series of 1867, from Headquarters of the Army, and on March 16, 1869, by General Orders, 18, series of 1869, from Headquarters of the Army, the State of Illinois was added to the division. The Department of Texas was added to the Division November 1, 1871, by General Orders, 66, series of 1871, from the War Department, and the Department of the Gulf was added January 4, 1875. June 22, 1875, the limits of the Department of the Platte, belonging to the division, were extended to include Fort Hall, Idaho, by General Orders, 65, series of 1875, from the War Department.

At the present time, 1882, the Military Division of the Missouri consists of the Departments of Dakota, the Platte, the Missouri and Texas.

The Department of Dakota comprises the State of Minnesota and the Territories of Dakota and Montana.

The Department of the Platte includes the States of Iowa and Nebraska, the Territories of Wyoming and Utah, and a portion of Idaho.

The Department of Missouri embraces the States of Illinois, Missouri, Kansas and Colorado, Indian Territory and Territory of New Mexico, with two posts in Northern Texas, Forts Elliott and Bliss.

The Department of Texas consists of the State of Texas.

The division thus includes the territory extending from the British boundary on the north, to the Mexican frontier of the Rio Grande on the south, and from Chicago on the east to the western boundaries of New Mexico, Utah and Montana on the west.

To garrison the military posts and to furnish troops for field operations, the present force in the division comprises eight regiments of cavalry, twenty regiments of infantry, and one battery of artillery, aggregating 15,940 officers and men.

INDIANS AND INDIAN WARS.

The principal Indian tribes living within the limits of the division are distributed as follows:

In the North, in the Department of Dakota, are to be found the Sioux, Northern Cheyennes, Crows, Pippewas, Poncas, Assinaboinies, Flatheads, Piegan, and Gros Ventres.

In the Department of the Platte are the Bannocks, Shoshones, Utes, Arapahoes, Pawnees, Winnebagoes, Pottawatomies, Omahas, Kickapoos, Miamis, Poncas, and Otoes.

In the Department of the Missouri are the Northern and Southern Cheyennes, Arapahoes, Kiowas, Comanches, Apaches, Navajoes, Pueblos, and semi-civilized tribes in the Indian Territory (Choctaws,

Cherokees, Chickasaws, etc.), while in the Department of Texas are the Lipans, Seminoles, and Tankawas; that Department being also the resort of the roving and predatory bands from New Mexico and Old Mexico.

The taking of an Indian census is always a matter of extreme difficulty, owing to the objection of the Indian against being counted. With the best information attainable, however, the entire number of Indian tribes embraced within the limits of the Military Division of the Missouri, is ninety-nine, aggregating about 175,000 persons who are scattered over an area of more than 1,000,000 square miles of frontier country.

Since the date at which this record of engagements begins (March 2, 1868), those tribes in the division which have been most actively engaged in hostilities with the whites, are the Sioux, Northern and Southern Cheyennes, Kiowas, Comanches, Arapahoes, Utes, and Apaches. In addition to the wars with these tribes, the division has been invaded, at intervals, by hostiles from the outside, some of the more notable engagements having been with Indians belonging to the military departments of the Pacific slope, such as the Nez Percés, the Bannocks, and the Arizona Apaches; with periodical incursions from Old Mexico, by bands who affiliated with our own Indians living near the Rio Grande frontier.

CHRONOLOGICAL RECORD.

1868.

In the Department of the Missouri, in the spring of 1868, only a very few minor engagements with Indians were reported, previous to the general outbreak which occurred in the summer of that year; they were chiefly in the district of New Mexico, and occurred as follows:

On March 11th, Apache Indians raided the settlements in the neighborhood of Tularosa, New Mexico, killing and mutilating eleven men and two women, capturing one child, running off a large number of sheep, about two thousand two hundred, and other stock. These marauders were pursued by a detachment of Troop H, Third Cavalry, under command of First Lieutenant P. D. Vroom, Third Cavalry, but having the advantage of three days' start, the Indians escaped into the Guadalupe Mountains, abandoning some of the sheep, which were recovered.

March 25th, the settlers upon Bluff Creek, Kansas, were attacked by Indians and driven from their houses; no details of this raid being officially reported.

April 17th, at Nesmith's Mills, New Mexico, a detachment of Troop H, Third Cavalry, commanded by Sergeant Glass, had a fight with Indians, the troops having one man wounded. Ten Indians were reported killed and twenty-five wounded.

June 6th, Captain D. Monahan, Third Cavalry, in command of detachments of Troops G and I, Third Cavalry, started from Fort Sumner, New Mexico, in pursuit of a band of Navajoe Indians, who had murdered four citizens within twelve miles of that post. He followed their trail for a hundred miles, finally surprising them in a ravine,

where he killed three Indians and wounded eleven, the balance escaping. The troops sustained no losses.

June 25th, near Fort Hays, Kansas, a detachment of troops attacked and pursued a band of hostile Indians, but no casualties occurred.

THE OUTBREAK OF 1868.

Early in August a body of about two hundred and twenty-five Cheyennes, Arapahoes and Sioux appeared among the advanced settlements on the Saline River, north of Fort Harker, Kansas. On August 10th, after being hospitably fed by the farmers, the Indians attacked them, robbed their houses and brutally outraged four females until insensible. Six houses were attacked, plundered and burned.

On the same day August 10th, near the Cimarron River, Kansas, two separate attacks were made by Indians upon the advance and rear guards of a column of troops commanded by Lieutenant Colonel Alfred Sully, Third Infantry. The attack upon the advance guard was repulsed by a charge, in which two Indians were killed, without casualty to the troops. In the attack upon the rear guard, who made a successful defense, one soldier was killed. Ten Indians were reported killed and twelve wounded.

August 12th, Indians attempted to stampede the stock by a dash into the camp of the column under General Sully, but were frustrated in their designs. Later they attacked his main body in large force, but were repulsed after a severe fight, lasting several hours, in which two soldiers were killed and three wounded. Twelve Indians were reported killed and fifteen wounded.

August 12th, the Indians, who had raided the settlements on the Saline on August 10th, devastated those on the Solomon River, Kansas, where, though kindly received and fed by the people, they plundered and burned five houses, stole ten head of stock cattle, murdered fifteen persons, wounded two and outraged five women. Two of these unfortunate women were also shot and badly wounded. A small band crossed to the Republican River and killed two persons there, but the main body returned to the Saline, with two captive children named Bell. Here they again attacked the settlers with the evident intention of clearing out the entire valley, but whilst a Mr. Schermerhorn was defending his house, Captain Benteen, with his troop of the Seventh Cavalry, arrived by a swift march from Fort Zarah, went to the relief of the house and ran the Indians about ten miles. Two women who had been ravished and captured by the Indians, were rescued. The same day Major Douglass, commanding at Fort Dodge, Kansas, reported that a band of Cheyennes had robbed the camp of R. M. Wright of two horses and some arms, and that one hundred and thirty-two horses and mules had been run off from a Mexican train at Pawnee Fork, above Cimarron Crossing.

August 13th, General Sully's command in Southern Kansas was again attacked, one soldier was killed and four wounded. The troops routed the Indians, of whom ten were reported killed and twelve wounded.

August 14th, at Granny Creek, on the Republican, a house was plundered and burned, one person killed, one wounded, and one woman outraged and captured. The same day, near Fort Zarah, Kansas, Indians ran off twenty mules, which were recaptured by the troops. One man was wounded, one Indian reported killed and five wounded.

August 18th, Indians attacked a train on Pawnee Fork, Kansas, and kept it corralled for two days, but were unable to capture it. Cavalry from Fort Dodge arrived and dispersed the Indians, who returned to the attack the same night, but were again repulsed. Five men were wounded; the Indian loss, estimated, was five killed and ten wounded.

August 19th, a party of wood choppers on Twin Butte Creek were attacked by about thirty Indians, three killed and nine cut off, as reported by Lieutenant G. Lewis, Fifth Infantry, on August 23d. All the animals (twenty-five) were driven off, and Mr. Jones, the contractor, chased, though making his escape by abandoning his horse and concealing himself amongst some trees in a ravine.

August 22d, Indians ran off twelve head of stock from the town of Sheridan, Kansas.

August 23d, the stage to Cheyenne Wells had to return, being chased by thirty Indians four miles. The same day Captain Bankhead, Fifth Infantry, commanding Fort Wallace, Kansas, reported the Denver stage coach attacked by Indians between Pond Creek and Lake Station; also that Comstock's ranch was attacked on the night of August 20th; two men were killed and the others living there being driven into Pond Creek, one man being mortally wounded and dying at Fort Wallace on the night of August 21st. In Northern Texas eight persons were killed and three hundred head of stock cattle captured. At Bent's Fort, on the Arkansas, fifteen horses and mules and four head of cattle were also run off.

August 24th, in the vicinity of Bent's Fort, three stage coaches and one wagon train were attacked.

August 25th, Indians killed a herder near Fort Dodge, Kansas, and Acting Governor Hall, of Colorado, reported a band of two hundred Indians devastating Southern Colorado.

August 27th, Captain Bankhead, Fifth Infantry, commanding Fort Wallace, reported that a band of thirteen Indians killed a citizen named Woodworth between Fort Lyon and the town of Sheridan; another citizen named William McCarty was killed on the 23d, near Lake Station, Colorado. Thirty Indians attacked the stage near Cheyenne Wells, and would have captured it but for the stout resistance of the escort. A body of about two hundred and fifty Indians also threatened the train of Captain Butler, Fifth Infantry, causing him to return to Big Springs. Acting Governor Hall, of Colorado, again telegraphed that Arapahoes were killing settlers and destroying ranches in all directions. Lieutenant F. H. Beecher, Third Infantry, reported two experienced government scouts named Comstock and Grover attacked by Indians professing friendship. Both were shot in the back, Comstock instantly killed; but, by lying on the ground and making a defense of Comstock's body, Grover kept off the Indians till night and made his escape.

August 28th, near Kiowa Station, Indians killed three men and drove off fifty head of stock. Mr. Stickney, the station keeper, whilst with one man in a wagon, was attacked and wounded. The sergeant at Lake Station reported two employees driven in there and the station keeper and stock tender at Reed's Springs driven off.

August 29th, Captain Penrose, Third Infantry, commanding Fort Lyon, reported a train of thirteen wagons attacked by Indians, eighteen miles from the Arkansas River, the oxen killed, and the train destroyed; the men in charge, twenty-one in number, escaping in the night to Fort Lyon.

August 31st, Lieutenant Reily, Fifth Infantry, reported Indians had run off two hundred horses and forty cattle from the stage company's station at Kiowa Creek.

September 1st, near Lake Station, J. H. Jones, stage agent, reported a woman and a child killed and scalped, and thirty head of stock run off by Indians; at Reed's Springs, three persons were killed and three wounded; at Spanish Fort, Texas, four persons were murdered, eight scalped, fifteen horses and mules run off, and three women outraged; one of these three women was outraged by thirteen Indians, who afterwards killed and scalped her and then killed her four little children.

September 2d, on Little Coon Creek, Kansas, a wagon, guarded by four soldiers, commanded by Sergeant Dittoe, Company A, Third Infantry, were attacked by about forty Indians. Three of the men were badly wounded; three Indians were killed and one wounded. One of the men bravely volunteered to go to Fort Dodge for help, which eventually arrived, under command of Lieutenant Wallace, Third Infantry.

September 4th. Major Tilford, Seventh Cavalry, commanding Fort Reynolds, Colorado, reported four persons killed the day before near Colorado City. A large body of Indians also attacked the station at Hugo Springs but were repulsed by the guards.

September 5th, Indians drove off five head of stock from Hugo Springs and then went off and burned Willow Springs Station.

September 6th and 7th, twenty-five persons were killed in Colorado, and on the 7th, Hon. Schuyler Colfax telegraphed: "Hostile Indians have been striking simultaneously at isolated settlements in Colorado for a circuit of over 200 miles."

September 8th, Captain Bankhead, Fifth Infantry, commanding Fort Wallace, reported about twenty-five Indians had killed and scalped two citizens near Sheridan, and also drove off seventy-six horses and mules from Clark's train on Turkey Creek.

Lieutenant Wallingford, Seventh Cavalry, was sent to assist a wood train of thirty-five wagons and fifty men, attacked at Cimarron Crossing, who had been fighting four days. They had two men and two horses killed, seventy-five head of cattle run off, and many mules wounded. Five miles farther west the remains of another train of ten wagons captured and burned were found; fifteen men with this train were burned to death by the Indians.

September 9th, between Fort Wallace and Sheridan, Kansas, Indians burned a ranch and killed six persons. The same ranch was also burned two weeks before and had been rebuilt.

September 10th, Indians raided settlements on Purgatoire River. Troops from Fort Lyon, under Captain Penrose, Third Infantry, pursued rapidly, overtook the Indians on Rule Creek, Colorado, and killed four, recovering twelve head of stolen stock. Two soldiers were killed and one wounded, and five horses died from exhaustion in the chase. The same day Captain Butler, Fifth Infantry, Fort Wallace, reported the stage fired into by Indians, four miles east of Lake Station.

September 11th, eighty-one head of stock cattle, belonging to Clarke & Co., hay contractors, were run off from Lake Creek.

September 12th, General Nichols, traveling to Fort Reynolds, was attacked by Indians, who were driven off by the guard. They then ran off eighty-five head of stock belonging to Thompson & McGee, near Bent's old fort, and made a raid on a house at Point of Rocks, running off four head of stock there.

Between September 11th and 15th, the column commanded by Lieutenant-Colonel Alfred Sully, Third Infantry, consisting of Troops A, B, C, D, E, F, G, I, and K, Seventh Cavalry, and company F, Third Infantry, had a series of fights with Indians. Three soldiers were killed and five wounded. The total Indian loss was reported as twenty-one killed and twelve wounded.

September 15th, on Big Sandy Creek, Colorado, Troop I, Tenth Cavalry, commanded by Captain Graham, were attacked by about one hundred Indians, and seven soldiers were wounded. Eleven Indians were reported killed and fourteen wounded.

September 17th, Ellis Station, Kansas, was burned and one man killed. The settlements on Saline River, Kansas, were again raided by Indians who were attacked, driven off, and pursued by a detachment of Seventh Cavalry, three soldiers being wounded; the Indian loss estimated, was three killed and five wounded. Three miles from Fort Bascom, New Mexico, Indians also killed a herder and ran off thirty mules; troops from the post pursued the Indians for one hundred and twenty-five miles, but could not overtake them.

Brevet Colonel G. A. Forsyth, with his company of fifty scouts, took the trail of a party of Indians who had committed depredations near Sheridan City, and followed it to the Arickaree Fork of the Republican River, where he was attacked, on the 17th of September, by about seven hundred Indians, and after a very gallant fight repulsed the savages, inflicting a loss on them of thirty-five killed and many wounded. In the engagement Lieutenant F. H. Beecher and Surgeon Moore were killed, Forsyth twice wounded, and four of his scouts killed and fifteen wounded, the command existing on horse flesh only for a period of eight days. The gallantry displayed by this brave little command is worthy of the highest commendation, but it was only in keeping with the character of the two gallant officers in command of it, Brevet Colonel G. A. Forsyth, and Lieutenant Frederick H. Beecher. While the command was beleaguered, two scouts stole through the Indian lines and brought word to Fort Wallace of its perilous situation. Brevet Colonel H. C. Bankhead, captain Fifth Infantry, commanding Fort Wallace, with the most commendable energy started to its relief with one hundred men from that point, and Brevet Lieutenant-Colonel

Carpenter's company of the Tenth Cavalry, reaching Forsyth on the morning of the 25th of September. Upon receipt by telegraph and couriers, of the news of Forsyth's desperate situation, a column of troops under General Bradley, from the Department of the Platte, then in the field in the vicinity of the Republican River, also pushed hard for the scene of his fight, to lend assistance, arriving almost simultaneously with the relief column of Colonel Bankhead from Fort Wallace, Kansas.

September 19th, Captain Bankhead, Fifth Infantry, Fort Wallace, reported a body of fifteen Indians had fired into the Mexican ranch, four miles east of Big Timber, Kansas.

September 29th, on Sharp's Creek, Indians attacked a house, capturing Mr. Bassett, his wife and child. They burned the house, killed Mr. Bassett, and after carrying off Mrs. Bassett with her baby only two days old, finding her too weak to travel, they outraged her, stripped her naked, and left her with her infant to perish on the prairie.

October 2d, General Hazen reported an attack on Fort Zarah by about one hundred Indians, who were, however, driven off. They then attacked a provision train, killed a teamster and stole the mules from four teams, after which they attacked a ranch eight miles distant, and drove off one hundred and sixty head of stock. General Sully also reported an attack by Indians on a train between Fort Larned and Fort Dodge; three citizens were killed, three wounded and over fifty mules run off.

October 4th, Major Douglass reported that Indians had wounded a Mexican at Lime-Kiln; also that they had attacked a train on the road, killed two men, wounded two, destroyed stores, and ran off stock, whilst also, at Asher Creek settlement, Indians ran off seven head of horses and mules.

October 10th, eight horses and mules were run off from Fort Zarah, as reported by Lieutenant Kaiser, Third Infantry.

October 11th, Captain Penrose, Third Infantry, reported three hundred Indians on the Purgatoire, on October 7th, and that they had killed a Mexican and run off thirty-eight head of stock.

October 12th, Lieutenant Belger, Third Infantry, reported a party of Indians near Ellsworth, Kansas, where they killed one man, and several were missing.

October 13th, a house at Brown's Creek was attacked.

October 14th, Indians attacked camp of Fifth Cavalry on Prairie Dog Creek, Kansas. Of Troop L, Fifth Cavalry, one man was killed and one wounded. The Indians also ran off twenty-six cavalry horses. On the same day Captain Penrose, Third Infantry, reported that Indians had attacked a train on Sand Creek, Colorado. Led by "Satanta," chief of the Kiowas, they ran off the cattle, and captured a Mrs. Blinn and her child. These prisoners were afterwards cruelly murdered by the Indians, in General Custer's attack on "Black Kettle's" camp, November 27th.

October 15th, on Fisher and Yocuey Creeks, a house was attacked, four persons killed, one wounded, and one woman captured.

October 18th, on Beaver Creek, Kansas, Troops H, I, and M, Tenth Cavalry, Captain L. H. Carpenter commanding, had a fight with a large body of Indians, in which three soldiers were wounded and ten Indians killed.

October 23d, at Fort Zarah two persons were killed by Indians, who sustained a loss of two killed.

October 25th and 26th, a column consisting of Troops A, B, F, H, I, L, and M, Fifth Cavalry, and a company of scouts under Major E. A. Carr, Fifth Cavalry, had a fight with a large body of Indians on Beaver Creek, Kansas. One soldier was wounded; the Indians had thirty killed, a number wounded, and lost, also, about one hundred and thirty ponies, mostly killed, besides a large amount of camp equipage.

October 26th, near Central City, New Mexico, three citizens were killed by Indians.

October 30th, in an attack on Grinnell Station, Kansas, one Indian was wounded.

November 7th, on Coon Creek, Kansas, the stage was attacked and a horse captured by Indians.

November 15th, a squadron of the Seventh Cavalry struck a party of Indians one hundred and forty miles from Fort Harker and pursued them for ten miles; Indian loss, estimated, was five wounded.

November 17th, Indians attacked a train seven miles from Fort Harker and ran off about one hundred and fifty mules.

November 18th, Indians killed two government scouts, seven miles from Fort Hays, Kansas, and captured their horses.

November 19th, on Little Coon Creek, Kansas, one person was murdered and five Indians killed. The same day near Fort Dodge, one white person and two Indians were killed. In the same vicinity a detachment of Troop A, Tenth Cavalry, under Sergeant Wilson, had a fight in which two Indians were killed. Indians also attempted to stampede the beef contractor's herd, half a mile from Fort Dodge, Kansas; Lieutenant Q. Campbell, Fifth Infantry, with companies A and H, Third Infantry, and a detachment of Fifth Infantry, pursued the Indians for seven miles, killing four and wounding six of them. The troops had three men wounded.

November 20th, on Mulberry Creek, south of Fort Dodge, two government scouts, named Marshall and Davis, were killed by Indians.

November 25th, in the Indian Territory, twenty horses and mules were stolen and two Indians killed.

In addition to the foregoing murders and outrages, the following were reported by Acting Indian Agent S. T. Walkley, and P. McCusker, United States interpreter, all occurring in Northern Texas:

January, 1868, twenty-five persons were killed, nine scalped, and fourteen children captured; the latter were afterwards frozen to death whilst in captivity. In February, seven were killed, fifty horses and mules stolen, and five children captured; two of the latter were surrendered to Colonel Leavenworth, and the remaining three taken to Kansas. In May, three houses were attacked, plundered, and burned. In June, one person was killed, and three children belonging to Mr. McElroy captured; while in July, on the Brazos River, Texas, four persons

were killed. In nearly all these instances, the most savage and horrible barbarities were perpetrated upon the unfortunate victims of the Indians.

So boldly had this system of murder and robbery been carried on, that, since June, 1862, not less than eight hundred persons had been murdered, the Indians escaping from the troops by traveling at night, when their trail could not be followed, thus gaining enough time and distance to render pursuit, in most cases, fruitless. This wholesale marauding would be maintained during the seasons when the Indian ponies could subsist upon the grass, and then in the winter, the savages would hide away, with their villages, in remote and isolated places, to live upon their plunder, glory in the scalps taken, and in the horrible debasement of the unfortunate women whom they held as prisoners. The experience of many years of this character of depredations, with perfect immunity to themselves and families, had made the Indians very bold. To disabuse their minds of the idea that they were secure from punishment, and to strike them at a period when they were helpless to move their stock and villages, a winter campaign was projected against the large bands hiding away in the Indian Territory.

General Getty, commanding the District of New Mexico, was directed to send out a column from Fort Bascom, New Mexico; this was commanded by Brevet Lieutenant-Colonel A. W. Evans, Third Cavalry. Another was started out from Fort Lyon, Colorado, under General E. A. Carr; whilst a third, and the largest, consisting of eleven troops of the Seventh Cavalry, under General Custer, and twelve companies of Kansas volunteer cavalry, together with several companies of the Third and Fifth Infantry, was organized, at Fort Dodge, Kansas, under command of General Sully. The last named expedition established "Camp Supply" in the Indian Territory, whither the Department Commander, General Sheridan, proceeded in person to supervise operations during this experimental campaign.

General Sheridan personally accompanied the main column from Camp Supply to Fort Cobb, directing all of its operations as well as those of the columns from Fort Lyon, under General Carr, and from Fort Bascom, under Colonel Evans, until the final surrender of the Indians and the close of the winter's campaign.

The object of the winter's operations was to strike the Indians a hard blow and force them onto the reservations set apart for them; or if this could not be accomplished, to show to the Indian that the winter season would not give him rest; that he, with his villages and stock, could be destroyed; that he would have no security, winter or summer, except in obeying the laws of peace and humanity.

The plan of operations to accomplish these purposes was to allow the small column from Fort Bascom, consisting of six troops of cavalry, two companies of infantry, and four mountain howitzers, aggregating five hundred and sixty-three men, operate along the main Canadian, establishing a depot at Monument Creek, and remaining out as long as it could be supplied, at least until some time in January; the column of General Carr, seven troops of the Fifth Cavalry, to unite with a force under Captain Penrose, then out, composed of one troop of the Seventh

and four of the Tenth Cavalry, establish a depot on the headwaters of the North Canadian, and operate south towards the Antelope Hills and headwaters of Red River. These columns were really beaters in, and were not expected to accomplish much. The main column from "Camp Supply" was expected to strike the Indians, either on the headwaters of the Washita, or still farther south on the branches of Red River.

November 26th, General Custer struck the trail of a war party, composed of "Black Kettle's" band of Cheyennes, with other Cheyennes and Arapahoes. They had been north, had killed the mail carriers between Dodge and Larned, also an old hunter at Dodge, and two express-men sent back by General Sheridan with letters. As soon as Custer struck the trail he corralled his wagons, left a small escort with them, and followed the Indian trail, which was very fresh and well marked in the deep snow, until it led into Black Kettle's village on the Washita. The next morning, before daylight, the Osage Indian trailers discovered the village of the Indians, and notified Custer, who at once made the most admirable dispositions for its attack and capture. At dawn a charge was made, the village captured and burned, eight hundred horses or ponies shot, in accordance with positive orders, one hundred and three warriors killed, and fifty-three squaws and children captured.

Whilst this work was going on, all the Indians for a distance of fifteen miles down the Washita collected and attacked Custer; these Indians were Cheyennes, Comanches, Kiowas, and Apaches; they were driven down the stream for a distance of four or five miles; when, as night was approaching, Custer withdrew and returned to a small train of provisions which he had directed to follow up his movements. Our loss in the attack at the village was Captain Louis M. Hamilton and three men killed, with three officers and eleven men wounded. Unfortunately, Major Elliott, of the Seventh Cavalry, a very gallant and promising young officer, seeing some of the young boys escape, followed, with the sergeant-major and fifteen men, to capture and bring them in; after securing them, and while on their way back to the regiment, Elliott's party were surrounded and killed. It occurred in this way: Elliott followed the boys shortly after the attack on the village, taking a course due south and nearly at right angles to the Washita River. After traveling south a mile and a half from the village a very small branch of the Washita was crossed and an open prairie reached; on this prairie the boys were captured and were being brought back, when the party was attacked by Indians from below, numbering from one thousand to fifteen hundred. Elliott fought his way back towards the small creek before named until within rifle range of the creek, when he was stopped by Indians who had taken position in the bed of the creek and picked off his men, who formed a little circle, around which their dead and horribly mutilated bodies were found. No one of those back with the regiment knew of Elliott's party having followed the Indian boys; no one heard the report of their guns and no one knew of their exact fate until they were discovered afterwards, savagely mutilated almost beyond recognition.

General Custer, after destroying the village and driving the Indians some four or five miles down the Washita, returned, as before mentioned, to the train of supplies which he had directed to follow him, and next day started back to Camp Supply with his prisoners, where he arrived on the 1st of December.

The blow that Custer had struck was a hard one, and fell on the guiltiest of all the bands, that of Black Kettle. It was this band, with others, that, without provocation, had massacred the settlers on the Saline and Solomon, and perpetrated cruelties too fiendish for recital.

In his camp were found numerous articles recognized as the property of the unfortunate victims of the butcheries before described; also a blank book with Indian illustrations of the various deviltries they had perpetrated. They had spared neither age nor sex; in all instances ravishing the women, sometimes forty or fifty times, and while insensible from brutality and exhaustion, forced sticks up their persons. On one occasion a savage drew a saber and used it in the same barbarous manner upon the person of the wretched woman who had fallen into his hands.

With the capture and destruction of Black Kettle's village, the work of the expedition was not complete. Although the weather was bitter cold, the thermometer 18° below zero, with blinding snow storms raging, the column pressed on, digging and bridging ravines for the passage of the train. This was continued until the evening of December 16th, when the vicinity of the Indians was again reached. They were mostly Kiowas, and did not dream that soldiers could operate against them in such awful weather. Completely taken by surprise, they agreed that all the warriors should join the column and march with it to Fort Cobb, while their villages moved to the same point. This was only a decoy, however, to save themselves from attack; for all slipped off, except the head chiefs Satanta and Lone Wolf, whom Custer had been ordered to arrest. When the column reached Fort Cobb, it was found that the villages, instead of moving there, were already nearly a hundred miles distant, hurrying in the opposite direction. Orders were immediately issued for the execution of the chiefs Satanta and Lone Wolf, unless the villages should deliver themselves up at Fort Cobb in two days. All came back eventually under this pressure, and the lives of their chiefs were saved. At Fort Cobb were found most of the Comanches and Apaches, who had hastened into the reservation there after the fight with Custer on the Washita, November 27th.

While these operations were going on, Brevet Lieutenant Colonel A. W. Evans moved from Fort Bascom up the main Canadian, to Monument Creek, there established his depot, and with the most commendable energy struck off south, on to the headwaters of Red River, discovered a trail of hostile Comanches who had refused to come in, followed it up with perseverance, and on the 25th of December attacked the party, killed, as nearly as could be ascertained, twenty-five, wounded a large number, captured and burned their village, destroyed a large amount of property, and then moved to a point about twelve miles west of Fort Cobb.

Meanwhile, General Carr was scouting along the main Canadian, west of the Antelope Hills, and the country was becoming so unhealthy for Indians that the Arapahoes and the remainder of the Cheyennes concluded to surrender and go upon the reservation selected for them. The operations of the troops had forced these Indians over into the eastern edge of the Staked Plains, where there was no game, and the limited amount of supplies which they had been able to put up for the winter had been mostly lost in the engagement on the Washita and in their subsequent flight.

The surrender was made by "Little Robe," with other representative chiefs, for the Cheyennes; by "Little Raven" and "Yellow Bear," for the Arapahoes; by "Lone Wolf" and "Satanta," for the Kiowas, and by "Esse-Ha-Habit," for the Comanches; they agreed to deliver up their people at Fort Cobb as speedily as possible, claiming that it would take some time to get in, on account of the exhausted condition of their stock.

The Arapahoes were faithful to their agreement, and delivered themselves up under their head chief, "Little Raven." The Cheyennes broke their promise and did not come in, so General Custer was ordered against them, and came upon them on the headwaters of Red River, apparently moving north; it is possible they were on their way to Camp Supply, as they had been informed that if they did not get into the Fort Cobb reservation within a certain time they would not be received there, but would be received at Camp Supply.

Custer found them in a very forlorn condition, and could have destroyed most of the tribe, certainly their villages, but contented himself with taking their renewed promise to come into Camp Supply, and obtained from them two white women whom they held as captives. The most of the tribe fulfilled this latter promise so far as coming into the vicinity of Camp Supply and communicating with the commanding officer; but "Tall Bull's" band again violated the promise made, and went north to the Republican, where they joined a party of Sioux, who, on the 13th of May, 1869, were attacked by General Carr and defeated with heavy loss; whereupon, the whole tribe moved into Camp Supply.

Whilst the Arapahoes and Cheyennes were negotiating for surrender, the Quehada, or Staked Plains Comanches, sent a delegation to Fort Bascom, offering to surrender themselves, expecting, perhaps, to obtain better terms there than had been offered them already; but General Getty arrested the delegation, which was ordered to Fort Leavenworth, and finally returned to their people upon condition that they would all deliver themselves up on the reservation at Medicine Bluff or at Fort Sill. This they complied with, and so were fulfilled all the objects had in view at the commencement of the winter's campaign, viz: punishment inflicted, property destroyed, the Indians convinced that winter would no longer bring them security, and most of the tribes south of the Platte forced upon the reservations set apart for them by the government.

In all, from March 2, 1868, to February 9, 1869, there were officially reported in the Department of the Missouri three hundred and fifty-three officers, soldiers and citizens killed, wounded or captured by In-

dians. Of the Indians there were reported, officially, three hundred and nineteen killed, two hundred and eighty-nine wounded and fifty-three captured. The numbers of the Indians who surrendered at the various points mentioned were not officially ascertained with accuracy, but they amounted to about twelve thousand.

1869.

Whilst the majority of the Indians who had been devastating the lines of the Arkansas, the Smoky Hill, and the southern tributaries of the Republican were now upon reservations, depredating continued in various localities, and engagements with Indians were constantly reported.

January 28th, among the settlements on the Solomon River, a scouting party of the Seventh Cavalry had two men wounded, six Indians being reported killed and ten wounded.

January 29th, on Mulberry Creek, Kansas, a detachment of cavalry under Captain Edward Byrne, Tenth Cavalry, had a fight in which two men were wounded and six Indians killed.

February 7th, troops from Fort Selden, New Mexico, pursued Indians who had stolen stock three miles from that post, but the marauders escaped into the mountains before they could be overtaken.

March 9th, near Fort Harker, Kansas, Indians with stolen stock were overtaken by troops, five Indians captured and all the stock recovered.

March 17th, near Fort Bayard, New Mexico, Apaches committed some murders and depredations. Troops pursued them hotly to their village which, with its contents, was burned and five Indians wounded; no casualties to the troops.

April 7th, on the Musselshell River, Montana, detachments of Companies D, F, and G, Thirteenth Infantry, commanded by Captain E. W. Clift, Thirteenth Infantry, had a fight in which nine Indians were killed; one soldier was killed and two wounded.

April 16th, near Fort Wallace, Kansas, Indians attacked and chased an officer and his escort into the post, but without casualties on either side.

April 20th, in the Department of the Missouri, troops pursued marauding Indians; locality not stated; wounded three Indians, burned their camp and recovered fifty head of stolen stock.

April 22d, in Sangre Cañon, New Mexico, a cavalry scouting party overtook a band of hostile Indians, wounding five of them and recovering nineteen horses and a stolen check for \$500.

May 2d, near San Augustine, New Mexico, Indians ambushed a train guarded by soldiers, and made a desperate but unsuccessful effort to capture it. Two soldiers were killed and four wounded; five Indians were killed and ten reported wounded.

May 10th, at Fort Hays, Kansas, Indian prisoners made a murderous assault with knives upon their guards, mortally wounding the sergeant in charge, but were overpowered.

Extensive field operations against the Southern Indians having been relieved by the surrender of large numbers and the escape north-

ward of bands who went in that direction to join their allies in the neighborhood of the Platte, the column of seven troops of the Fifth Cavalry which, under General Carr, had scouted southward from Fort Lyon the previous winter, marching upwards of twelve hundred miles, was directed to proceed across the country from the Arkansas to the Platte, carefully patrolling the valleys of the intermediate streams for any bands of hostiles lurking there. The command left the vicinity of Fort Wallace, Kansas, May 10th, and on the 13th found indications of Indians upon Beaver Creek. A party of ten men under Lieutenant Ward were sent to reconnoiter, and about eight miles from "Elephant Rock" saw the smoke of a large village. Lieutenant Ward's reconnaissance was discovered by a hunting party of Indians and his detachment narrowly escaped capture, being obliged to charge through the Indians in regaining the main column. The latter in full force galloped off to the attack of the village which had taken flight upon their discovering the troops, the warriors remaining back to fight and cover the retreat of their families. The column made a brilliant charge in which three soldiers were killed and four wounded; of the Indians, twenty-five were reported killed and fifty wounded. Night came on and the following morning, after destroying the Indian camp with much of its property, the pursuit was taken up, the wagon train dropped with an escort, and the column, with five days' rations on their horses, pushed ahead upon the trail. This was followed energetically, and upon May 16th on Spring Creek, Nebraska, the advance guard under Lieutenant Volkmar, Fifth Cavalry, overtook the Indians, about four hundred warriors strong, who turned upon the party and nearly captured it after a determined resistance in which three soldiers were wounded and many of the horses, the detachment defending themselves stoutly behind the bodies of their horses against repeated charges. The main column arrived in time to rescue the advance guard, the Indians taking flight before they could be struck in force. A hot chase for some fifteen miles ensued across the Republican again southward, the Indians at dark breaking up into small parties which descended anew upon the Kansas settlements. The column proceeded to the Platte River whence, after refitting at Fort McPherson, it returned to search for the Indians, who proved to be the "Dog Soldier" Cheyennes.

May 18th, Indians ran off stock near Fort Bayard, New Mexico; were pursued by troops and their village destroyed.

May 25th, the settlements in Jewell County, Kansas, were raided, six citizens killed and three women outraged.

May 26th, near the town of Sheridan, Kansas, Indians attacked a wagon train, wounded two teamsters and ran off three hundred mules.

May 29th, Indians attacked Fossil Station, Kansas, killed two persons, wounded four, and at night threw a train from the track of the Kansas Pacific Railway.

May 30th, on Salt Creek, Kansas, Indians killed a settler, attacked three couriers of the Seventh Cavalry and chased them for ten miles. They also attacked three government teamsters, near Fort Hays, Kansas, and drove them into the post.

May 31st, a government train was attacked on Rose Creek, Kansas; two soldiers and five Indians were reported wounded.

June 1st, on Solomon River, Kansas, the camp of a detachment of the Seventh Cavalry was attacked, one soldier and one Indian were reported wounded, and three Indian ponies were captured by the troops. On the same day, the settlements on the Solomon River were raided, thirteen men killed, houses burned, and about one hundred and fifty head of stock run off. A detachment of cavalry followed the trail in pursuit, but without success.

June 4th, Indians pulled up the track of the railroad at Grinnell Station, Kansas, but were repulsed by the military guard there.

June 10th, on the Solomon River, Kansas, Indians attempted to stampede the stock at the camp of a scouting party, but were fired upon by the sentinels and escaped. On the same day the settlements on Asher Creek, Kansas, were raided and fifteen head of stock run off. The Indians were pursued ten miles by a party of cavalry, were attacked and the stolen stock recovered.

June 11th, on the Solomon River, Indians attacked the flankers of an artillery command under Captain Graham, First Artillery, but were routed and pursued.

June 12th, on the Solomon, some cavalry struck and pursued the trail of a band which had been depredating upon that stream, but did not succeed in overtaking the Indians. At Edinburg, Kansas, Indians ran off twenty head of cattle, were pursued and the stock recovered. The settlements on the Solomon were again raided, about ten persons killed and some two hundred and fifty head of stock run off.

June 19th, near Sheridan, Kansas, a surveying party, escorted by a detachment of the Seventh Cavalry, were attacked; the escort had two men wounded, but repulsed the Indians with a loss of four killed and twelve wounded. The same day Indians attacked a government train near Fort Wallace, Kansas, and drove it into the post; troops from the garrison pursued the Indians, capturing one pony; no casualties.

June 20th, at Scandinavia, Kansas, the settlement was raided by Indians; they were pursued by a detachment of cavalry and one Indian killed.

June 26th, Indians dashed into the town of Sheridan, Kansas, killed one man and pursued another who, however, escaped.

These depredations were doubtless mostly committed by the large band which had been fought by General Carr's command, on the Beaver and other streams, in May. This column of seven troops Fifth Cavalry, having refitted at Fort McPherson, Nebraska, returned with three mounted companies of Pawnees, to the vicinity of the Beaver and Solomon, found several trails of the Indians and followed them until they united upon the Republican River, not far from the scene of Forsyth's severe fight the preceding September.

July 5th, three troops of the Fifth Cavalry, and one company of Pawnee scouts, from this column, under the command of Major W. B. Royall, Fifth Cavalry, struck a war party not far north of the Republican, killed three, wounded several, and the balance escaped; the troops returned to the camp of the main column on the Republican.

July 8th, a detachment of four men, Troop M, Fifth Cavalry, in coming back to the camp of General Carr's command, were attacked by Indians; Corporal Kyle, in charge of this party, made a very gallant defense, wounding two of the Indians and succeeding in reaching the camp. A dash was made into the camp about midnight by Indians attempting to stampede the herd; one of the Pawnee sentinels was wounded but the Indians were driven off without other loss to the command. The next day the trail of the Indians was pursued rapidly, the wagons dropped with an escort; and on

July 11th, the main village was completely surprised on "Summit Springs," a small tributary of the South Platte, in Colorado. Seven troops of the Fifth Cavalry and three companies of mounted Pawnee scouts charged the village which, with its contents, was captured and burned. Fifty-two Indians were killed, an unknown number wounded, and seventeen captured, among the killed being "Tall Bull," the chief of the band. Two hundred and seventy-four horses, one hundred and forty-four mules, quantities of arms and ammunition, and about \$1,500 in United States money, were among the more important items of the extensive captures. So perfect was the surprise and so swift the charge over a distance of several miles, that the Indians could do little but spring upon their ponies and fly, and the casualties to the troops were only one soldier wounded, one horse shot, and twelve horses killed by the hot and exhausting charge. In the Indian camp were two unfortunate white women captives from the Kansas settlements, a Mrs. Alderdice and a Mrs. Wiechell. The former had a baby whom the Indians had strangled. After enduring the saddest miseries, whilst prisoners, at the very moment of rescue by the troops, both women were shot by the Indians. Mrs. Alderdice was found dead with her skull crushed in; Mrs. Wiechell was shot in the breast, but the bullet was extracted from her back by the surgeon, Dr. Tesson. Mrs. Alderdice was laid in a grave dug where she perished, the troops assembled and the burial service read over her by an officer. With such care as the troops could afford Mrs. Wiechell whilst on the march, she was carried to Fort Sedgwick, Colorado, where she eventually recovered, the soldiers turning over the captured money to this unhappy woman, who had seen her husband murdered and mutilated, her home and friends destroyed and had herself, according to her own pitiful and broken story, been the victim of miseries almost too awful for description.

July 10th to July 17th, in New Mexico, upon the stage route the coaches were attacked three times in one week, the Indians capturing all the mails, robbing the passengers, and killing ten persons in all.

July 25th, troops struck the trail of hostile Indians near Fort Stanton, New Mexico, pursued the savages to their village, totally destroyed it, and recaptured three stolen mules, the Indians escaping amongst the cañons; no casualties.

July 27th, troops pursued a band of Indians who had committed depredations in New Mexico, overtaking and charging the savages, wounding three of them, capturing three Indian ponies and recovering some stolen stock.

August 2d, the column of the Fifth Cavalry, with three companies of Pawnee scouts, which had struck Tall Bull's camp at Summit Springs July 11th, having refitted at Fort Sedgwick, Colorado, started out again, under command of Colonel Royall, Fifth Cavalry, to hunt for the Indians who had escaped from that fight. Just as the column was about camping, after its first day's march, south of Fort Sedgwick, the Indians were struck, but escaped as night fell. The pursuit was taken up next morning and the trail hotly followed for two hundred and twenty-five miles, to north of the Niobrara River, Dakota, where the chase had to be abandoned, the country being almost impassable, even without the train, and the horses of the cavalry being completely worn out. The Indians abandoned large quantities of camp equipage, which were destroyed, two mules and forty horses and ponies being captured by the command.

August 3d, at Fort Stevenson, Dakota, Indians attempted to stampede the herd, but were defeated and pursued by the garrison, the Indians losing one horse; no casualties to the troops.

August 9th, Indians destroyed one hundred and fifty yards of the telegraph line at Grinnell Station, Kansas, but were frightened off by the military guard at the station.

August 15th, near San Augustine Pass, New Mexico, Troops F and H, Third Cavalry, under Captain F. Stanwood, Third Cavalry, had a fight, of which no details are given.

August 19th, Colonel De Trobriand, Thirteenth Infantry, commanding Fort Shaw, Montana, reported an attack by Piegan Indians upon a government train from Camp Cooke; also the murder of a citizen named Clarke and the wounding of his son, near Helena, Mont. The teamsters with the train in the fight, which took place on Eagle Creek, killed four and wounded two Indians, losing one man killed and twenty oxen. Subsequently hostilities were carried on at different points in the vicinity, cattle carried off and white men murdered, the hostiles appearing to be Bloods, Blackfeet and Piegan.

August 21st, Indians attacked Coyote Station, Kansas, but were repulsed by the military guard there; no casualties.

September 5th, troops from Fort Stanton, New Mexico, pursued and routed a band of hostile Indians, of whom it was estimated three were killed and seven wounded. The troops had two men wounded.

September 12th, near Laramie Peak, Wyoming, an escort to a train had a fight, in which one soldier was killed and one wounded.

September 14th, near Little Wind River, Wyoming, Mr. James Camp and Private John Holt, Company K, Seventh Infantry, were killed near the Snake reservation. On Popoagie River, Wyoming, a detachment of Troop D, Second Cavalry, under Lieutenant Stambaugh, had a fight, in which two soldiers were killed; two Indians were killed, ten wounded and one Indian pony captured.

September 15th, near Whisky Gap, Wyoming, a detachment of Company B, Fourth Infantry, under Lieutenant J. H. Spencer, had a fight with about three hundred Indians, one soldier being captured and doubtless killed.

September 17th, on Twin Creek, Wyoming, the United States mail escort had a fight with Indians. Near Fort Stanton, New Mexico, Indians ran off stock, were pursued, their village destroyed, and three Indians wounded; no casualties to troops.

At Point of Rocks, Wyoming, a stage was attacked and the driver killed. On Twin Creek another escort party to the United States mail were attacked and driven into the mountains.

September 20th, troops from Fort Bascom, New Mexico, pursued a band of Indians to the mountains, where they escaped, with loss of much of their plunder.

September 23d, troops from Fort Cummings, New Mexico, pursued marauding Indians, and after a long chase recaptured thirty stolen horses.

September 24th, Indians raided Mexican ranches near Fort Bayard, New Mexico. Troops followed the Indians to their village in the mountains, destroyed it, with its contents, and wounded three Indians; no casualties to the troops.

September 26th, troops pursued a band of marauding Indians to their village in the San Francisco Mountains, New Mexico, burned it, wounded two Indians, and recovered some stolen sheep; no casualties to troops. The same day, on Prairie Dog Creek, Kansas, a column, consisting of Troops B, C, F, L and M, Fifth Cavalry; Troops B, C and M, Second Cavalry, and two companies of Pawnee scouts, all under command of General Duncan, was about encamping after a long day's march, when the advance guard of twenty cavalrymen, commanded by Lieutenant Volkmar, Fifth Cavalry, struck a band of Indians which attempted to cut off Major North and the chief scout and guide, William Cody. The detachment charged the Indians and pursued them to their village, which was hastily abandoned. Some of the Pawnee scouts joined in the chase, but night came on and the Indians escaped. One Indian was killed, one captured, and seven animals killed and captured, together with the entire village, consisting of fifty-six lodges, which, with their contents, were destroyed on the following day. A portion of the column pursued for several days, but the Indians made no camp for ninety miles, and the chase was abandoned. From an Indian prisoner it was ascertained that the band were all Sioux, under Pawnee Killer and Whistler, both of whom had escaped from the Summit Springs fight, on July 11th. Some surveyor's instruments were also found in the Indian camp, and identified as belonging to Mr. Nelson Buck's surveying party, consisting of about twelve persons, all of whom had been recently murdered and their camp destroyed, not far from the scene of the fight of September 26th. The band had come from the north about three months before, and had attacked another surveying party about twenty miles south of the Platte, on August 27th. In their flight from the village, the prisoner stated that the band, numbering a hundred warriors, besides women and children, had abandoned everything but their arms and animals, and had agreed not to stop until they reached the Sioux reservation north of the Platte.

September 29th, Indians committed murders and depredations near Fort Bayard, New Mexico. Troops from the post pursued the Indians

for a week, destroyed their village and contents, killed three, and wounded three Indians and captured three horses. One soldier was wounded in the fight.

October 15th, troops pursued a band of Indians to the Mogollon Mountains, New Mexico, and recaptured thirty stolen horses.

October 23d, troops pursued a band of Indians to the Miembres Mountains, New Mexico, where they overtook and defeated them, killing three, wounding three, and capturing three ponies and some supplies; one soldier was wounded.

November 2d, near Fort Sill, I. T., troops recovered a white captive from a band of Indians.

November 18th, Lieutenant H. B. Cushing, Third Cavalry, with a detachment of Troop F, after a pursuit of two hundred miles, had a fight with Indians in the Guadaloupe Mountains, New Mexico, in which two soldiers were wounded, the troops killing and wounding a number of Indians and recovering most of about one hundred and fifty head of stolen stock.

December 2d, near Horseshoe Creek, Wyoming, about one hundred and fifty Indians attacked the mail escort of ten men, under Sergeant Bahr, Company E, Fourth Infantry, proceeding from Fort Fetterman to Fort Laramie. One soldier was killed and several Indians reported killed and wounded. The same day and vicinity the mail escort of ten men, enroute from Fort Laramie to Fort Fetterman, was attacked and two men wounded.

December 15th, Indians attacked Bunker Hill Station, Kansas, but were repulsed by the military guard.

December 26th, in the Guadaloupe Mountains, New Mexico, a detachment of Troop F, Third Cavalry, commanded by Lieutenant Cushing, had a fight, in which Lieutenant Franklin Yeaton, Third Cavalry, received severe wounds, from the effects of which he afterwards died. The same detachment had another fight.

December 30th, on Delaware Creek, New Mexico, no details of which are given.

1870.

On the 27th of September, 1869, the Superintendent of Indian Affairs for Montana officially reported to the Commissioner of Indian Affairs renewed depredations by Indians, supposed to be Blackfeet, near Helena, Mont. A citizen named James Quail, having lost a quantity of horses and mules, went to hunt for them. His body was found pierced with arrows and horribly mutilated. Nine Indians were seen a few days before driving off stock from that direction, and within the preceding two months over four hundred horses and mules had been stolen. These papers were all referred by the War Department to the division commander for action, and it was resolved, as soon as winter should set in, and the Indians be unable to move, to send a force from Fort Ellis or Fort Shaw and strike them a hard blow. The project for punishing this band, numbering about fifteen hundred (men, women and children), having been approved by the War Department on January 19th, a column, consisting of Troops F, G, H and L, Second Cavalry, and a detachment of about fifty-five mounted infantry, under Brevet Colonel E. M.

Baker, Second Cavalry, left Fort Shaw, Montana, to strike the Piegan camp of "Mountain Chief," on the Marias River, Montana.

January 23d, after a secret night march, the column completely surprised the camps of "Bear Chief" and "Big Horn," killing one hundred and seventy-three Indians, wounding twenty, capturing one hundred and forty women and children and over three hundred horses. Leaving a detachment in the camp to destroy the property, the column pushed down the river after the camp of "Mountain Chief," but his lodges were found deserted and were burned by the troops. The Indians scattered in every direction, but the weather was too severe to pursue them, so the column marched for the Northwest Fur Company's station, arriving there on January 25th. Colonel Baker sent for the chiefs of the Bloods, had a consultation with them, and obliged them to give up all the stolen stock in their possession. The column reached Fort Ellis again February 6th, having made a march of about six hundred miles in the coldest weather known for years in the always severe climate of that region. In the attack on the Indian villages the only loss to the troops was one man killed.

March 21st, at Eagle Tail Station, Kansas, Indians attacked a railroad working party, but were driven off by the military guards; no casualties.

April 6th, on Bluff Creek, Kansas, a government train and escort were attacked by Indians, who were driven off with a loss of three wounded, but one hundred and thirty mules were stampeded.

April 23d, a railroad working party in Kansas were attacked by Indians, who were repulsed by the military guards; no casualties.

May 4th, near Miner's Delight, Wyoming, Troop D, Second Cavalry, Captain D. S. Gordon commanding, had a severe fight with a band of Indians, in which seven Indians were killed and one wounded. First Lieutenant Charles B. Stambaugh, Second Cavalry, and one enlisted man were killed.

May 16th, Indians made a concerted attack along the Kansas Pacific Railroad for a distance of thirty miles, killing ten persons and running off about three hundred animals. A troop of cavalry pursued the Indians to the Republican River, Nebraska, but without success.

May 17th, Sergeant Leonard and four men of Troop C, Second Cavalry, were attacked by about fifty Indians, on Spring Creek, Nebraska. The party succeeded in driving off the Indians, who lost one killed and seven wounded.

May 18th, Indians attacked Lake Station, Colorado, and were pursued by a party of cavalry, but without success.

May 21st, Hugo Station, Colorado, was attacked by Indians, who were, however, repulsed.

May 28th, near Camp Supply, Indian Territory, Indians attacked a train, stampeded all the mules, and killed one man. The same day they ran off a quantity of stock near that post and killed another man.

May 31st, Carlyle Station, Kansas, was attacked by Indians; they were repulsed by the military guard, who had two men wounded. The Indian loss, estimated, was three wounded. The same day, on Beaver Creek, Kansas, a detachment of Company B, Third Infantry, under

Sergeant Murray, had a fight, in which one man was killed and one wounded.

June 1st, Indians raided the settlements on Solomon River, Kansas. They were pursued by a troop of the Seventh Cavalry and four Indians wounded.

June 3d, the mail station at Bear Creek, Kansas, was attacked by Indians, who were repulsed by the military guard after a severe fight, in which two soldiers were killed and one wounded. Five Indians were killed and ten wounded. At other places in the Department of the Missouri, the same day, a Mexican was killed and scalped, a train was attacked, a teamster killed, and forty mules stampeded, and Captain Armes, Tenth Cavalry, being separated from his escort, was attacked and chased, but escaped.

June 6th, near Fort Selden, New Mexico, the chief engineer officer, District of New Mexico, whilst surveying near that post, was attacked and two mules captured. Troops from the post pursued the Indians who, however, escaped. The same day near Camp Supply, Indian Territory, an attack on a train was repulsed. The same night Indians again attacked this train and were driven off. They also captured thirteen mules from a citizen train near the post. Two Indians were wounded.

June 8th, near Camp Supply, Indian Territory, the United States mail escort was attacked by Indians who were repulsed with a loss of three killed and five wounded; one soldier was wounded. On the same road, a government train guarded by a troop of cavalry, was attacked by Indians, who were repulsed after a severe fight, in which three soldiers were wounded. Three Indians were killed and their wounded were estimated at ten. Between Fort Dodge and Camp Supply, Indian Territory, Troops F and H, Tenth Cavalry, commanded by Lieutenant Bodamer, Tenth Cavalry, had a fight in which two soldiers and three Indians were wounded. The same day Indians made an attack near Fort McPherson, Nebraska, were pursued by Troop I, Fifth Cavalry, under Lieutenant Thomas, and their camp attacked and destroyed, the Indians escaping.

June 11th, near Bunker Hill Station, Kansas, cavalry couriers carrying dispatches were attacked and chased into the station. Near Camp Supply, Indian Territory, Indians attempted to stampede the horses at the cavalry camp. They were pursued by Troops A, F, H, I, and K, Tenth Cavalry, and Companies B, E, and F, Third Infantry, commanded by Lieutenant Colonel A. D. Nelson, Third Infantry, were attacked, six Indians killed and ten wounded. Three soldiers were wounded and two cavalry horses killed. Near Grinnell Station, Kansas, a train escorted by cavalry was attacked by Indians, who were repulsed after a fight of three hours; no casualties.

June 13th, near Grinnell, Kansas, Indians attacked a railroad working party but were repulsed by a detachment of cavalry; three Indians were killed and ten wounded.

June 14th, a battalion of Seventh Cavalry encountered a band of Indians on the Republican River, Kansas. The advance troop attacked the Indians who, however, escaped with a loss of one pony killed.

June 15th, near Fort Bascom, New Mexico. Indians plundered a ranch, outraging, killing and scalping a woman, and stealing five horses belonging to the post trader. The Indians were fired upon by the guard, but escaped.

June 16th, on Mulberry Creek, Kansas, Indians killed three wood-choppers, horribly mutilating their bodies.

June 21st, near Carson, Colorado, Indians attacked a Mexican train and killed five teamsters. Cavalry pursued next day, but without success.

June 25th, near Medicine Bow, Wyoming, a detachment of Troop I, Second Cavalry, under Lieutenant C. T. Hall, had a fight with Indians; no details given.

June 27th, at Pine Grove Meadow, Wyoming, a detachment of Troop A, Second Cavalry, under Lieutenant R. H. Young, Fourth Infantry, attacked a band of about two hundred Indians in the mountains. One soldier was wounded and fifteen Indians reported killed. The detachment not being strong enough to dislodge the Indians, the latter escaped.

In August, a detachment of cavalry struck a band of Indians on the Washita River, Indian Territory, killing three and wounding ten Indians. Two soldiers were killed and five wounded.

October 6th, near Looking Glass Creek, Nebraska, Troop K, Second Cavalry, Captain J. Egan, had a fight in which one Indian was killed.

October 16th, in the Guadalupe Mountains, New Mexico, Troop B, Eighth Cavalry, Captain William McCleave, had a fight in which one Indian was killed and eight captured.

October 30th, eighteen miles from Fort Stanton, New Mexico, Indians stampeded fifty-nine mules from a train. Cavalry pursued for two hundred and fifty-five miles, destroyed the Indian village, recovered the mules, and captured three squaws.

November 19th, near Carson, Colorado, Indians stampeded sixty-eight mules from a Mexican train.

November 18th, Indians attacked Lowell Station, Kansas, and killed one man.

November —, in the Guadalupe Mountains, New Mexico, a detachment of Troop A, Eighth Cavalry, under Lieutenant Pendleton Hunter, captured nine Indians.

1871.

February 17th, near Fort Bayard, New Mexico, Indians raided the ranches, murdered the settlers and ran off stock. Troops pursued the Indians to the mountains, burned their village, destroyed its contents and recovered many of the stolen animals. One soldier was killed and two wounded; of the Indians fourteen were reported killed and twenty wounded.

February 26th, near Grinnell, Kansas, Indians attacked a hunter's camp, burned it, and ran off the stock.

March 18th, near Fort Dodge, Kansas, Indians made repeated attacks upon a government train, three men being killed and five Indians wounded in the various attacks.

April 30th, Apache Indians from Arizona depredated in Colorado and killed, altogether, twenty persons.

May 2d, Apaches committed depredations near Fort Selden, New Mexico. A troop of cavalry pursued them for two hundred and eighty miles, but without success.

May 3d, near Cimarron, New Mexico, Indians raided the settlements, killed three persons, and ran off about nine hundred and fifty head of stock. Troops pursued, captured twenty-two Indians, and recovered seven hundred and fifty-seven head of the stolen animals.

May 11th, Major Price, with a squadron of the Eighth Cavalry, pursued a band of marauding Navajoes in New Mexico, captured two prominent chiefs and recovered a large number of stolen animals.

May 12th, Indians ran off stock near Red River, Texas. Troops from Fort Sill, Indian Territory, pursued and defeated the Indians, who lost three killed and four wounded; no casualties to the troops.

May 15th, Indians stampeded twenty-two mules from a government train in New Mexico.

May 17th, Indians attacked a train on Red River, killing seven persons, wounding one and running off forty-one mules. Going to Fort Sill, Indian Territory, they publicly avowed the deed in the presence of General Sherman and the Post Commander, whereupon the leaders, "Satanta" and "Satank" were arrested and placed in irons. Their followers resisted, when one Indian was killed and one soldier wounded.

May 24th, on Birdwood Creek, Nebraska, a detachment of Fifth Cavalry, under Lieutenant E. M. Hayes, captured six Indians.

May 29th, in the Department of the Missouri, cavalry pursued a band of Indians and recaptured five hundred stolen animals.

June 28th, near Larned, Kansas, Indians ran off fourteen horses; near Pawnee Fork, Kansas, they also stole seventy mules.

July 2d, Fort Larned, Kansas, was attacked by Indians, who were repulsed by the garrison; no casualties.

August 18th, Indians killed a settler and ran off his stock, twelve miles from Fort Stanton, N. M. Troops pursued, but without success.

September 19th, a small detachment of troops was attacked by Indians near Red River, Indian Territory. One soldier was wounded; two Indians killed and three wounded.

September 22d, near Fort Sill, Indian Territory, Indians killed two citizen herders and ran off about fifteen head of stock.

1872.

February 9th, on the North Concho River, Texas, Indians attacked a detachment of three men belonging to Troop B, Fourth Cavalry, commanded by Captain Rendlebrook, but no casualties were reported.

March 27th, near Fort Concho, Texas, a detachment of Troop I, Fourth Cavalry, under Sergeant Wilson, were attacked by Indians, of whom two were killed, three wounded and one captured, together with nineteen horses.

March 28th, a band of Indian and Mexican thieves were attacked by a detachment of cavalry near Fort Concho, Texas; two Indians were killed, three wounded and one captured.

April 20th, Troops A and H, Ninth Cavalry, under Captain M. Cooney, Ninth Cavalry, attacked a band of hostile Indians near Howard's Wells, Texas, killing six Indians. Lieutenant F. R. Vincent, Ninth Cavalry, was mortally wounded.

April 21st, Troop C, Fourth Cavalry, Captain J. A. Wilcox, were attacked by Indians in Texas and lost fourteen horses and two mules.

April 26th, Troop B, Third Cavalry, Captain C. Meinhold, attacked a war party of Indians on South Fork of Loup River, Nebraska, killing three Indians.

May 6th, at Tierra Amarilla, New Mexico, a small detachment of Troops E and K, Eighth Cavalry, under Lieutenant J. D. Stevenson, were attacked by a band of Ute Indians, one soldier being killed and one wounded, the Indians losing one killed and one wounded.

May 12th, between Big and Little Wichita Rivers, Texas, a detachment of the Fourth Cavalry, under Captain J. A. Wilcox, attacked a band of Kiowas, killing two Indians; one soldier was wounded.

May 19th, twenty-five miles from Fort Belknap, Texas, Kiowas attacked a party of citizens, killing one of them; two Indians were killed and two wounded.

May 20th, a detachment of the Ninth Cavalry and eight Indian scouts, under Lieutenant G. Valois, Ninth Cavalry, attacked a small band of Kickapoos on La Pendencia, Texas.

May 22d, between Fort Dodge, Kansas, and Fort Supply, I. T., a detachment of Troop E, Sixth Cavalry, acting as couriers, had one man killed and one wounded by Indians.

May 23d, on Lost Creek, Texas, a detachment of the Fourth Cavalry, under Captain E. M. Heyl, were attacked by Comanches, and had one man and one horse killed.

June 15th, a detachment of Company H, Eleventh Infantry, under Corporal Hickey, killed two Indians in a fight which occurred at Johnson's Station, Texas.

August 14th, near Pryor's Fork, Montana, a column consisting of Troops F, G, H, and L, Second Cavalry, and Companies C, E, G, and I, Seventh Infantry, commanded by Major E. M. Baker, Second Cavalry, were attacked by several hundred Sioux and Cheyennes. One soldier was killed, and one citizen and three soldiers wounded; two Indians were killed and ten wounded, most of them mortally.

August 15th, on Palo Duro Creek, New Mexico, Troop B, Eighth Cavalry, Captain Wm. McCleave, was attacked by a war party of Indians; one soldier was wounded, and four Indians killed and eight wounded.

August 16th, near Yellowstone River, Montana, an expedition commanded by Colonel D. S. Stanley, Twenty-second Infantry, was attacked by a large body of Indians.

August 17th, on the Yellowstone River, Montana, one man of Troop L, Second Cavalry, Captain L. Thompson commanding, was reported wounded by Indians.

August 18th, at mouth of Powder River, Montana, Companies D, F, and G, Twenty-second Infantry, Colonel D. S. Stanley commanding, had a fight with Indians, and again on August 21st and 22d, on O'Fallon's Creek, Montana.

August 26th, a war party of about one hundred and twenty-five Sioux attacked a detachment of one sergeant and six privates of the Sixth Infantry and two Ree scouts, twelve miles from Fort McKeen (afterwards known as Fort A. Lincoln), Dakota; the two Ree scouts were killed.

September —, Troop B, Second Cavalry, Lieutenant Randolph Norwood, attacked a war party of Indians between Beaver Creek and Sweetwater, Wyoming, killing one Indian.

September 19th, a detachment of one sergeant and seven men, Fourth Cavalry, and two Tonkawa scouts, attacked about fifty Comanche Indians in Jones County, Texas, killing one Mexican chief and recaptured eleven stolen horses.

September 29th, Colonel R. S. Mackenzie, with Troops A, D, F, I, and L, Fourth Cavalry, attacked a village of about two hundred lodges of Comanches near North Fork of Red River, Texas, destroyed the same with its contents, killed twenty-three warriors and captured between one hundred and twenty and one hundred and thirty prisoners. One enlisted man was killed and three wounded, together with a number of cavalry horses killed and wounded. A large number of horses and mules were captured from the Indians.

October 2d, about three hundred Sioux attacked Fort McKeen (Fort A. Lincoln), Dakota, wounding one and killing three Ree scouts.

October 3d, in Jones County, Texas, a detachment of Tonkawa scouts made an attack upon a camp of Comanches; no details given.

October 3d and 4th, near Heart River, Dakota, Lieutenant E. Crosby, Seventeenth Infantry, Lieutenant L. D. Adair, Twenty-second Infantry, and one civilian whilst hunting were attacked and killed by Sioux Indians.

October 14th, Fort McKeen (Fort A. Lincoln), Dakota, was again attacked by a large body of Sioux. Troops from the garrison, consisting of one company Sixth Infantry and eight Ree scouts, attacked the Indians, killing three of them and losing two enlisted men, killed.

December 6th, near the Rio Grande, Texas, Sergeant Bruce and six men, Ninth Cavalry, attacked a band of Mexican cattle thieves and recaptured fifty-nine head of stolen cattle.

During the year 1872, no general Indian war took place in the division, but the number of murders and depredations committed by small war parties in various places was greater than during the preceding year. The line of frontier settlements had steadily advanced during the year, especially in Kansas, Nebraska, Minnesota and Dakota, gradually absorbing the country which only a year or two before was in the possession of the Indians, and the transcontinental railway lines were progressing rapidly westward through the division. The Northern Pacific Railroad had reached the Missouri River about the close of the year, the actual surveys and locations for the railroad being made as far west as the mouth of the Powder River, two hundred miles beyond the Missouri. The Atchison, Topeka & Santa Fe Railway was extended as far west as Fort Dodge, Kansas, in its progress up the valley of the Arkansas, while surveying parties for the Southern Pacific Railway were engaged in locating the line of that road in both direc-

tions from the vicinity of El Paso. For the protection of the surveyors and the construction parties upon all these lines, a considerable force of troops was necessary as escorts, and minor engagements between Indians and these small detachments were of repeated occurrence. The guarding of the Rio Grande frontier against the incursions of border thieves consisting of Mexicans, half-breeds, and Indians, also furnished occasion for considerable activity on the part of the troops in that portion of the division, involving constant watchfulness and much patient endurance.

1873.

During the year 1873 the depredations of raiding parties of Mexican thieves, Indians and half-breeds in the vicinity of the Rio Grande continued, as did also the attacks by Indians upon the military posts and field escort detachments guarding the surveying and construction parties engaged upon the lines of railway.

April 30th, Lieutenant Harmon, with eleven men of the Tenth Cavalry, attacked a band of Mexican thieves about seven miles southeast of Fort Sill, Indian Territory, and recaptured thirty-six horses.

May 7th, about one hundred Sioux attacked the post of Fort A. Lincoln, Dakota, (previously known as Fort McKeen), garrisoned by Companies B and C, Sixth Infantry, and Company H, Seventh Infantry, commanded by Lieutenant-Colonel W. P. Carlin, Seventeenth Infantry. The Indians were driven off with a loss of one killed and three wounded.

May 18th, Colonel R. S. Mackenzie, Fourth Cavalry, with Troops A, B, C, E, I, and M, of his regiment, and a detachment of Seminole scouts under Lieutenant Bullis, Twenty-fourth Infantry, attacked and destroyed a village of fifty or sixty lodges of Kickapoos and Lipan Indians near Remolina, Mexico, killing nineteen Indians, taking forty prisoners and capturing fifty-six horses. The column marched at a trot or a gallop, a distance of seventy-five miles, between 1 o'clock in the afternoon of the previous day and 6 o'clock in the morning of the day of the attack, in order to reach and surprise this village whose location had been reported. The pack train of supplies was dropped during this rapid march, and for two days the troops were without other rations than a few crackers carried in their pockets. Among the prisoners taken was Costilietos, the principal chief of the Lipans.

June 15th and 17th, Sioux Indians again made two separate attacks upon the post of Fort A. Lincoln, Dakota. The garrison, constituted as before described, under Lieutenant-Colonel Carlin, Seventeenth Infantry, repulsed the attack, one Ree scout being wounded, three Sioux killed and eight wounded.

July 12th, on Live Oak Creek, Indian Territory, Troop L, Fourth Cavalry, Captain T. J. Wint, commanding, attacked a war party of Indians.

July 13th, near Cañada Alamosa, New Mexico, a detachment of Troop C, Eighth Cavalry, commanded by Captain G. W. Chilson, from Fort McRae, New Mexico, had a fight with a band of Indians, one soldier being wounded and three Indians killed; twelve horses and one mule stolen by the Indians were recaptured.

So bold and frequent had been the Indian attacks upon the military posts and the escorts to working parties on the railroads in the Department of Dakota, that an additional regiment of cavalry, the Seventh, was transferred to that department from the Military Division of the South, for the purpose of following and punishing these Indians if they continued their attacks. An expedition was organized under Colonel D. S. Stanley, Twenty-second Infantry, and a supply depot established near Glendive Creek where it empties into the Yellowstone, the point at which it was expected the surveying parties of the Northern Pacific Railway would run their line across the river. The troops comprising the "Yellowstone expedition" left Forts Rice and A. Lincoln about the middle of June, returning to their stations in September after accomplishing the purposes intended, having had several engagements with the hostiles during this period.

August 4th, Troops A and R, Seventh Cavalry, in advance, commanded by Captain M. Moylan, had a fight with Indians near Tongue River, Dakota, one soldier being reported missing in action and doubtless killed. Later in the same day the main column of the Seventh Cavalry, commanded by Lieutenant-Colonel G. A. Custer, were attacked by several hundred Sioux on the Yellowstone River, Montana; four enlisted men were reported killed, and Lieutenant C. Braden, Seventh Cavalry, and three enlisted men wounded.

August 11th, the column of ten troops, Seventh Cavalry, commanded by Lieutenant-Colonel G. A. Custer, were again attacked by a large body of Sioux on the Yellowstone River, Montana; four Indians were reported killed and twelve wounded.

August 31st, near Pease River, Texas, Troops E and I, Tenth Cavalry, Captain T. A. Baldwin, were attacked by a war party of Indians; one Indian was wounded.

September 30th, the same troops under Captain Baldwin attacked a band of hostiles at Mesquit Flats, Texas, recapturing nine stolen horses.

September 18th, Troops K and E, Second Cavalry, Captain J. Egan commanding, attacked a war party of Sioux Indians on the North Laramie River, capturing eighteen horses and mules.

September —, Troop H, Eighth Cavalry, Lieutenant H. J. Farnsworth, had a fight with Indians at Sierra San Mateo, New Mexico, killing two Indians.

October 1st, in the Guadalupe Mountains, New Mexico, Troop C, Eighth Cavalry, Captain G. W. Chilson, had a fight with Indians, killing three of them and wounding one. The same day, at Central Station, Texas, Sergeant Mew, with a detachment of Company K, Twenty-fifth Infantry, had a fight with Indians. At Camp Colorado, Texas, a detachment consisting of a sergeant and thirteen men were attacked by a party of Comanches, one Indian being wounded.

October 25th, Lieutenant J. B. Kerr and twenty-five men of the Sixth Cavalry attacked and captured a party of eight cattle thieves near Little Cabin Creek, Texas. Seventy horses and two hundred head of cattle stolen by the thieves were recaptured by the detachment.

December 5th, Lieutenant E. P. Turner, with a detachment of the Tenth Cavalry assisting a sheriff, overtook a band of twenty cattle thieves on Elm Creek, Texas, killed four of the thieves, captured sixteen of them and recovered about one thousand head of stolen cattle.

December 9th, Troop B, Fourth Cavalry, Lieutenant C. L. Hudson, had a fight with Indians on the west fork of the Nueces River, Texas.

December 10th, near Kickapoo Springs, Texas, a detachment of forty-one men of the Fourth Cavalry and nine Seminole scouts, commanded by Lieutenant C. L. Hudson, attacked a war party of Indians, killing nine, wounding several, and recapturing eighty-one stolen horses; one soldier was wounded.

December 27th, Corporal Wright, with a detachment of the twenty-fifth Infantry, had a fight with Indians on Deep Red Creek, Indian Territory; one Indian was wounded.

December 31st, a detachment of a sergeant and three privates, Company B, Twenty-fifth Infantry, were attacked by about fifteen Indians at Eagle Springs, Texas; one Indian was wounded.

(To be Continued.)



Editor's Table.

CAVALRY JOURNAL PRIZE ESSAYS.

In this, the July number of the CAVALRY JOURNAL, appears for the last time the announcement of the 1903 Prize Essay and the 1902-1903 CAVALRY JOURNAL prizes. One essay signed "Espuelas" has been received in competition for the historical prize essay. A large number of papers are entered in competition for the other prizes announced, in which every member of the Association is to have a vote for the determination of the best and second best paper. The committee to decide the award for the historical essay has been named, and has agreed to accept the invitation of the Publication Committee.

The prize will not be announced until the January, 1904, issue of the JOURNAL. In the meantime new prizes will be announced in the October JOURNAL.

DELAYED APPEARANCE OF THE JULY JOURNAL.

It was with much vexation that the Council found that the July number of the JOURNAL had to appear late, just as its predecessors. This time the fault can not be assigned to any persons or individuals. The delay was caused by the non-appearance of the paper for the JOURNAL, which had been ordered several months before it finally arrived.

The paper is made to order by an Eastern paper mill and was shipped in due time. The car in which the paper was shipped arrived in Kansas City about May 28th, and it was not unloaded until July 1st. This delay, which may seem inexplicable to outsiders, is easily accounted for by those who

had an opportunity of seeing the demoralization in freight conditions in Kansas City following the havoc wrought by the flood.

Through great favor shown us the paper was finally secured and shipped by express to Leavenworth. The Council hopes that this explanation will suffice to relieve it of the charge of dilatoriness. While the members have a right to expect the JOURNAL on time, the vexation to the Council has been much greater than to anyone else. Every possible precaution against a delay in the October number has been taken, and the Council promises to do everything in its power to get that issue out on time, and establish a precedent for future JOURNALS.

CAVALRY CLUB, LONDON, ENGLAND.

Colonel G. H. Elliot, of the British Army, writes us that American cavalry officers visiting London may be made honorary members of the Cavalry Club, 127 Piccadilly, London, W., by applying through the military attaché at the United States Embassy, London, England. The CAVALRY JOURNAL will be found on file at the Club.

ARTICLES FOR THE CAVALRY JOURNAL.

In the front of this number will be found the list of contents for the October CAVALRY JOURNAL. Members are asked not to consider the publication of this list to mean that the Publication Committee no longer wishes contributions of articles. On the other hand all are invited to send in articles.

In this connection, a letter from Captain G. E. Stockle is very timely, and several extracts from it are here given. Captain Stockle writes:

"We cannot overestimate the value of the JOURNAL to the officers of the cavalry, and it is to ourselves that the editor must look for practically all of his copy. * * The space at the disposal of the JOURNAL is limited, and while in the past, unfortunately, the editor has at times been puzzled to find enough to make up a respectable number, I hope and

believe that if the responsibility of the members for the success of the JOURNAL were brought home to them, that the condition will change so that the editor's puzzle will be to take care of all the good things coming his way.

"I conceive the utility of the JOURNAL to be threefold: First, as a medium for discussion of disputed points, whereby any officer can express his particular views on the subject and have as audience practically the whole cavalry arm, instead of the limited circle of the Post Lyceum or Officers' Club; second, the medium whereby valuable ideas on practical matters, possessed by one or a few officers, on account of their special experiences or investigations, may be made the property of the whole body; and thirdly, as a valuable historical storehouse of facts.

"Considered in the first phase, little need be said. The disputants will say enough. Under the second head, we find the JOURNAL a most valuable factor in our individual military education. Scattered as we have been and still are, we have each of us been living and working under different conditions from the mass of our comrades, and have undoubtedly each of us met and solved problems which have not yet entered into the experience of the others. A knowledge of these may save the officer's successors some stumbles and perhaps a bad fall, and a still more important consideration is that the government will have better service from the man who knows what to do and what to avoid than from one who has to learn from experience. For example, an officer who has served in Alaska can tell us something about dog teams, about the special clothing the men should have, what has been done during disturbances among the miners, and conditions of service there generally. A fair proportion of the cavalry has not yet been in the Philippines, and a description at first hand of scouting expeditions, the means of living and supply, the different peoples one meets and how to deal with them, and so on, would be of great value to those who have not yet served there. A transport quartermaster could tell us many things from his point of view.

"I am aware that some of these subjects are excellently treated in publications of the Military Information Division, but these lack a personal element that would enter into an article contributed to the JOURNAL, and then sometimes in many counselors there is wisdom. Besides, the publications of the Military Information Division are not always available.

"The reports and articles written by National Guard officers are often of much interest, and I think the JOURNAL

management would appreciate it if they could have the opportunity to pass upon them.

"Finally, every member of the cavalry arm ought to belong to the Association. I think that the matter of joining need only be presented to most of the young officers who have recently entered the service, and they will become members, if not already such.

AMERICAN LOSSES IN THE PHILIPPINES.

Captain J. D. L. Hartman, First Cavalry, sends a bulletin published by the Filipinos of Batangas, February 13, 1899, with the following remarks:

"The enclosed communication is a free translation of an Insurrecto Bulletin found near Bauan, Batangas, P. I., during November, 1901. As far as known, this document has never appeared in print, and it is not believed that the casualties referred to within have ever appeared in any reports from the Commanding General, Eighth Army Corps, to the War Department at Washington. It might be well to have some investigation as to who the three captured generals were, and in what manner they were exchanged. Great secrecy must have been observed, as up to the present time their names have escaped publicity."

The Bulletin is as follows:

"Be it known to everybody that this telegram was received this morning, and reads as follows:

"Saturday and Sunday, the 4th and 5th of the present month, a battle took place, and there were killed on our side less than two thousand (2,000) individuals, including those who were in the church of Paco.

"On Monday, our President descended upon Caloocan, and in the battle which took place there, three hundred (300) Americans were killed, and we captured one general and seven hundred (700) of his soldiers.

"On Tuesday we cut them off and our illustrious chief of operations, Senor Montenegro, took about four hundred (400) Americans and one general as prisoners.

"On Thursday we captured one general, and many Americans were killed.

"On Saturday at Paranaque a fight took place, and nearly all of the advance guard of the Americans were killed, and afterwards they bombarded Paranaque. Since Thursday they also bombarded Caloocan and Navotas, but the Germans were the only ones who intervened, and now tranquility reigns supreme in the suburbs of Manila. General Otis implored for the suspension of hostilities and for the termination of the war through diplomatic means; the answer of our illustrious President, Senor Aguinaldo, was that the question must be decided through war as it had commenced with war.

"BATANGAS, February 13, 1899."

O'GRADY.

The following verses are based upon a real occurrence, and certified to by the author:

Friday evening, after stables, the sergeant passed the word
That inspection would be mounted; such a "roaring" as was heard,
For the captain was a "corker." When he looked you in the eye,
You'd wish you were a "doughboy," if he asked the reason why.

O'Grady had a coat sleeve, he stuffed it full of hay,
Then strapped it on the pommel in the regulation way;
Said he: "I'll show ye's 'rookies,' be the vartue ov me oath,
I'll 'bluff' this on the 'old man' as me 'shoved up' overcoat."

Next morning, at inspection, when the captain took the troop,
He "went" for "coffee coolers" from the nose unto the croop.
Said he: "Look at O'Grady." A smile he never "cracked."
"That's the way the saddles of this troop hereafter must be packed."

"Ride to the front and center; show this lazy, shiftless crew,
The way to pack an overcoat as soldiers ought to do."
O'Grady took his pack off in a hesitating way
And emptied out the coat sleeve stuffed with quartermaster's hay.

Then such tearing, and such rearing, and such language as was there;
The chills ran up and down my back, my hat stood on my hair,
For the captain "put it to him" with a vim and with a will—
Now O'Grady's digging ditches while he's holding down the "mill."

FORT SHERIDAN, March 21, 1903.

G. E. G.



Book Reviews.

**The Complete
Camper's
Manual.***

Buzzacott, the inventor and manufacturer of the famous Buzzacott's oven, presents in a handy pocket volume a complete camper's manual. While its principal use is to tell the uninitiated how to make "camping out" easy, profitable and enjoyable, it will also give valuable hints to those to whom camping out is an old story and pertains to their routine duties. In this pamphlet is pointed out plainly how to provide for your every want, to tell you what you need, where to get it, and how to use it. It contains many good recipes for camp dishes, and furnishes a lot of information on camping expedients not found in text books. The volume is not a compilation of camp stories written for the amusement of the reader, but for his instruction, and is well worth the time of any soldier. It is sent for ten cents in stamps or coin to any reader of the JOURNAL.

*THE COMPLETE CAMPER'S MANUAL. Paper cover. Price, 10 cents. Buzzacott. Chicago, Ill.

**Organization and
Equipment Made
Easy.***

This useful work has been compiled by the author with a view of presenting to officers the necessary information to enable them to pass the examination for promotion in this subject. The book contains a good digest of the salient features of the system of organization and equipment obtaining in the British army, which will be of use to all military students, in that it will save them the trouble of wading through the vast number of official books and regulations.

*ORGANIZATION AND EQUIPMENT MADE EASY. By Major S. G. Manning. Third edition. Gale & Polden, limited. London. 1903. Price, four and six.

Tactics Made Easy.*

This is a very small book containing chapters on marches, advanced and rear guards, outposts, reconnoitering and the attack and defense of position. It is intended as a very elementary treatise of the above subjects for men who will read a small book on tactics, though they may shy at a big one.

***TACTICS MADE EASY FOR NOM-COMS AND MEN.** By Colonel H. D. Hutchinson. Second edition. Gale & Polden, limited. London. 1903. Price six pence.

Aids to Skirmishing.*

This is a small treatise on skirmishing designed for the use of instructors of recruits. Too much care cannot be taken in imparting this instruction in a thorough and practical manner. The greater the extension of the squad, section or company on the firing line, the greater becomes the necessity for careful individual instruction so that the men may act correctly when independent of immediate control.

***AIDS TO SKIRMISHING.** Corrected to date. Gale & Polden, limited. London. 1903. Price, six pence.

Aids to Maneuver Duties.*

In this book are embodied instructions from the King's Regulations, together with notes by numerous officers, based on experience in battalion in maneuvers. It gives a lot of useful information in condensed form, and is designed principally for militia and volunteer officers at maneuvers.

***AIDS TO MANEUVER DUTIES.** Corrected up to date. Gale & Polden, limited. Aldershot. 1903. Price, six pence.

Practical Gunnery in the Lecture Room and in the Field.*

This work attempts to provide non-commissioned officers and men with the material for study necessary to secure gunnery prizes and badges in their corps. It, of course, embraces purely artillery branches and studies.

***PRACTICAL GUNNERY IN THE LECTURE ROOM AND IN THE FIELD.** Compiled by Captain H. T. Russell, R. A. Gale & Polden, limited. Aldershot, England, May, 1903. Price, two and six pence.



Publisher's Notices.

THE ADVERTISING DEPARTMENT.

This department has grown and kept pace with the rest of the JOURNAL, and a word in regard to it may not be amiss now that the new JOURNAL is starting on its second volume. It is asserted by some that this is not a necessary department, and there are a few who believe it to be out of place. The benefits derived from it are such, however, that the Council cannot dispense with it, and that being the case, the aid of all our members is invoked to make it a success.

It has required no little energy and attention to bring this branch of the JOURNAL from what it was in the July, 1902, number, to its present shape; but that it is a great help to the JOURNAL and the Association can be realized by anyone giving a thought to the inner workings of a magazine. It has enabled the JOURNAL to extend in many ways; it has made it possible to use illustrations for articles; to use better printing and paper; to increase the size, and also to increase the membership and list of subscribers. In order to realize how it has made this extension possible, it is only necessary to know what the copy sent to each member and subscriber costs and what is paid for it. The cost of the January number was ninety cents per copy. While the Association is not designed to create a fund, nor to make profits, yet it must be self-sustaining, and it has been thus far. The part played by the advertising department, and its importance to the JOURNAL, will be recognized and admitted by every one who gives consideration to the above facts.

While the JOURNAL thus depends to a certain extent on the success of its advertising, it is no less true that the adver-

tising department depends entirely upon the JOURNAL. The two are dependent upon each other, as in every other magazine, except that in case of the CAVALRY JOURNAL no profits are made, and every revenue derived from any source goes toward increasing the merits of the JOURNAL. Unless the JOURNAL is good no advertisements can be had. If the JOURNAL is continually getting better in its articles and its makeup, and increasing in the number of subscribers and members, the advertising will grow.

It is on account of the truth of these facts that our readers should welcome the growth of the space used for advertising purposes, and help the management in every way to make that department a success.

It is the purpose to make this department a reliable business directory for all readers of the JOURNAL. That our advertising patrons may receive a proper return, friends of the JOURNAL, and especially members of the Association, will confer a favor by stating, when they order, that the advertisement appeared in the JOURNAL. Thus, in an indirect way, every one can give his assistance toward developing the department and aiding the JOURNAL.

TO-KALON VINEYARD CO.

This firm has its vineyards in the Napa Valley, California, and its offices in Chicago. They are making a specialty of standard wines and liquors of domestic manufacture, and guarantee every article sold. Their motto is "Anything that is good enough for us to sell is good enough for us to guarantee." Read their offer for guaranteed "First National Rye" in the advertising department. The firm has a sound business standing, and ask you to open an account.

FESSENDEN SCHOOL FOR YOUNG BOYS.

Among our school ads. is one for a school for small boys, located on Albemarle Road, West Newton, Massachusetts, where it has a beautiful home with lots of room. The writer can recommend the school highly. Army families will find it a splendid place for their boys when it becomes necessary to send them to a boarding school.

LIFE INSURANCE.

Mr. H. W. Littlefield, an old time agent, is thoroughly conversant with all kinds of policies, and knows what is best for army officers. He says: "I call attention to loans and paid up values, in our new policies being granted, at end of second year. In case of lapse for any cause reinstatement can be had at any time within one year upon satisfactory medical examination and payment of premium due." On loans of \$500 or more only five per cent. interest is charged. Illustration by sample policies are furnished by Mr. Littlefield without obligation on the part of the inquirer.

HIGHLAND EVAPORATED CREAM.

The Helvetia Milk Condensing Company, of Highland, Illinois, has a new page of advertising in this number of the JOURNAL. Highland Cream needs no introduction to those of our readers who served in the Philippines. It was the best thing we had. But many of the officers' families do not know of the fine qualities of this canned cream. It is thoroughly reliable and as good as pure, sterilized cow's milk for all purposes, but it goes much farther and is delicious. Those who have not given it a trial should do so without fail. Write to the firm for information and sample.

WOOL VS. LINEN.

Apuleius, an old Roman author, says: "Wool, the excretion of a sluggish body, taken from sheep, was deemed a profane attire even in the times of Orpheus or Pythagoras, but flax, that cleanest production of the field, is used for the inner clothing of man." The Dr. Deimel Linen-Mesh Underwear is a product of the field, not of the sheep.

GREAT WESTERN CHAMPAGNE.

The Pleasant Valley Wine Company is located at Rheims, Steuben County, New York, in what is known as Pleasant Valley, at the head of Lake Kenka. The location is most beautiful and picturesque, and the climate of the region is especially adapted to culture of the grape. The company

was organized in 1860. It chooses its grapes from the best vineyards and manufactures its wines from the choicest stock. The wine is essentially American, and is branded for what it is—American Wine. "Great Western" Champagne, one of the products of the firm, was christened by the Hon. Marshall P. Wilder, of Boston, Mass.

BITTMANN-TODD GROCER CO.

This is an old firm known to many who have served at Fort Leavenworth. But their field of operation is not limited to that post, but invite all organizations and post exchanges to correspond with them. The firm has on its staff one of the most experienced and careful buyers to be found, and he knows what things are good and suitable for the soldier's fare.

BROOKS BROTHERS.

Brooks Brothers was established in 1818, and has been catering to army trade for a long time, and rendered eminent satisfaction. Officers stationed in the West should write for catalogues, samples and directions for ordering by mail. The line of civilian clothing is an especially good one at correct prices, and it would be advisable to give Brooks Brothers a trial.

ILLINOIS TRUST AND SAVINGS BANK.

This is an advertisement appearing for the first time in the JOURNAL. This is an old and reliable institution, and is recommended to all officers who do their banking business in Chicago.

RICHARD SPRINGE.

This civilian and military tailor has lately sprung into prominence for his correct and well fitting uniforms, though he has always executed in a satisfactory manner all work ordered of him. The fit and style of his service uniforms recommends his tailoring to all who have an opportunity to see them.

FINLAY, DICKS & Co.

"MUL-EN-OL" is an antiseptic lotion of great value. The writer has given it some trial and it has been most satisfactory so far. It is of especial value for the troop farrier as an antiseptic for scalds, burns or wounds, and reduces swellings of even long standing very quickly.

THE FRANK MILLER CO.

The page advertisement of Miller's "Harness Dressing" has appeared in the CAVALRY JOURNAL regularly since the beginning of the JOURNAL. To older cavalry officers this black dressing needs no introduction. But it will be well to call attention to the fact that The Frank Miller Co. is in the field with a tan dressing and cleaning materials for fair leather equipments that are equal to the former black dressing. Write to them for information.

KASPER OATS CLEANER CO.

There is no doubt that every troop should have its own oats cleaner. It will hardly ever happen that oats will be delivered in a satisfactory condition, and a cleaner is essential. Captain W. C. Brown, First Cavalry, writes that the Kasper Self-acting Oats Cleaner is all that can be desired. It requires no labor, and it certainly answers the purpose. The Quartermaster's Department should furnish each troop with one of these cleaners.

CODE PORTWOOD CANNING Co.

This is a new advertisement for the JOURNAL, but the name is not a new one to patrons of the commissary. They are successors to Code, Elfelt & Co., whose brands were so well known to the army. The change in the name of the firm has made no change in the quality of goods, except that there may be some improved methods in use.

SAM'L DODSWORTH BOOK CO.,

Agents for the Globe-Wernicke Elastic Book Cases at Leavenworth, Kansas, have a most complete bookbindery and stationery establishment. It is well worth while to visit

their place of business and look over the plant. The company make a specialty of binding army magazines, and their work in this respect can not be excelled, and the prices are very reasonable.

THE FRANKLIN MILLS COMPANY.

In these days of new and varied breakfast foods it is decidedly difficult to decide which is good and what is shoddy. A good test is to ascertain from some wholesale grocer the quotations on the various brands. Most of them are marked "anything you can get." Wheatlet to its credit is not on this list, and it has not a depreciated value. It is on top of the list of wheat preparations and can be safely recommended to all.

RICHARDSON & BOYNTON Co.

Have a new full page advertisement in this JOURNAL that will remind many an army officer and army wife of the name on the kitchen ranges and furnaces supplied by the government for army quarters. On that account a page in the CAVALRY JOURNAL is not out of place to remind post and purchasing quartermasters that this firm is still doing business. Their descriptive catalogue should be in every quartermaster's office.

TEACHENOR-BARTBERGER ENGRAVING Co.

This firm, located in Kansas City, should have a word of praise from the CAVALRY JOURNAL for the uniform excellence of its work. All the plates appearing in the various JOURNALS have been from their work-rooms. Of especially good execution is the frontispiece of this JOURNAL, the picture of the members of the General Staff of the Army. Anyone desiring prints of pictures appearing in the JOURNAL can be supplied free of charge with the desired number of copies upon application to the Secretary.



MEMBERSHIP OF THE UNITED STATES CAVALRY ASSOCIATION.

Numerous communications have been received requesting that the publication of the list of members be continued, and in deference to the wishes so expressed, the Council has decided to do so, especially because all the members are equally interested in the growth of the Association, and in the addition of new names.

The Council requests the active coöperation of all the members of the Association to aid the growth to the best of their ability.

FORT LEAVENWORTH, KANSAS,
July 1, 1903.

LIST OF MEMBERS OF THE UNITED STATES CAVALRY ASSOCIATION.

LIFE MEMBERS.

The Constitution no longer permits the creation of life memberships. This does not affect those who have been so elected.

Bixby, Wm. H., Major, Engineer Corps.	Parker, Dexter W.
Dodge, Charles C., General, N. G.	Remington, Frederick.
Grierson, H. B., Brig.-Gen., retired.	Windsor, Henry, Jr.
Norman, Wm. W., Colonel, Punjab Cav.	Wetmore, Wm. Borum.

REGULAR MEMBERS.

(The following are eligible to regular membership: (a) Commissioned officers of the cavalry of the regular army. (b) Former commissioned officers of the cavalry of the regular and volunteer services, provided their records are honorable; general officers of the regular army and former general officers.)

GENERAL OFFICERS.

Major-Generals.

Young, Samuel B. M.
Chaffee, Adna R.
MacArthur, Arthur.
Wade, James F.

Brigadier-Generals.

Summer, Samuel S.
Wood, Leonard.
Grant, F. D.
Bell, J. Franklin.
Funston, Frederick.
Baldwin, Frank D.
Wint, T. J.
Lee, J. M.
Carter, William H.
Biles, Tasker H.
Sanger, Joseph P.
Moore, Francis.

ADJUTANT-GENERAL'S DEPARTMENT.

Colonels.

Babcock, John B.
Hall, William P.
Barry, T. H.

Lieutenant-Colonel.

Steever, E. Z.
Majors.

Fountain, Samuel W.
McClernand, Edward J.
Finley, W. L.

INSPECTOR-GENERAL'S DEPARTMENT.

Lieutenant-Colonel.

West, Frank.

Major.

Gale, G. H. G.

JUDGE-ADVOCATE-GENERAL'S DEPT'.

Brigadier-General.

Davis, George B.

Lieutenant-Colonels.

Crowder, Enoch H.

Morrow, Henry M.

QUARTERMASTER'S DEPARTMENT.

Lieutenant-Colonel.

Pond, George E.

Majors.

Miller, W. H.

Hodgson, Frederick G.

Bellinger, John B.

Aleshire, James B.

Bingham, Gonzales S.

Cruise, Thomas.

Knight, John T.

Carson, John M., Jr.

Captains.

Slocum, H. J.

Wood, Winthrop S.

Williamson, Geo. McK.

Slavens, Thomas H.

Schofield, Richmond McA.

Walcott, Charles C.

White, George P.

Crabbs, Joseph T.

SUBSISTENCE DEPARTMENT.

Lieutenant-Colonel.

Smith, A. L.

Majors.

Brainard, D. L.

Bean, W. H.

Captains.

Davis, A. M.

Gallagher, H. J.

Hawkins, H. S.

PAY DEPARTMENT.

Lieutenant-Colonel.

Dodge, F. S.

Captain.

Whipple, H. S.

CORPS OF ENGINEERS.

Captain.

Potter, Chas. L.

ORDNANCE DEPARTMENT.

Chief of Ordnance.
Crozier, William.

SIGNAL CORPS.

Brigadier-General.
Greely, A. W.
Lieutenant-Colonel.
Allen, James.

PROFESSOR MILITARY ACADEMY.

Colonel.
Wood, E. E.

ARTILLERY.

Chief of Artillery.
Randolph, W. F.
Captain.
Van Deusen, Geo. W.

INFANTRY.

Captains.
Simpson, W. L., 6th Regt.

PORTO RICO REGIMENT.

Majors.
Swift, Eben.
Howze, R. L.

CIVIL LIFE.

Breaser A. L., *gen.*
Johnston J. A., *gen.*
Jones, R. C., *lieut.*
Ketcheson J. C., *capt.*
Lincoln, J. R., *gen.*
Russell, F. W., *lieut.*

RETIRED LIST.

Augur, Colon, *capt.*
Bacon, John M., *col.*
Baird, William, *capt.*
Banson, Matthew A., *capt.*
Bell, James M., *brig.-gen.*
Bernard, R. F., *U.-col.*
Biddle, James, *col.*
Boutelle, F. A., *capt.*
Braden, Chas., *1st lieut.*
Breck, Sam'l., *brig.-gen.*
Burnett, G. R., *1st lieut.*
Carlton, C. H., *brig.-gen.*
Carpenter, L. H., *brig.-gen.*
Carr, E. A., *brig.-gen.*
Carroll, Henry, *col.*
Cloud, J. W., *brig.-gen.*
Cole, George W., *capt.*
Compton, Charles E., *col.*
Converse, G. L., *capt.*
Craycroft, W. T., *lt.*
Davis, Wirt, *col.*
Dimmick, Eugene D., *col.*
Evans, George H., *capt.*
Fechet, E. G., *maj.*
Forbus, W. C., *col.*
Forsyth, J. W., *brig.-gen.*
Freemau, H. M., *brig.-gen.*
Guest, John, *capt.*
Harris, Moses, *maj.*
Holabird, S. B., *brig.-gen.*

Hoyle, George G., *maj.*
Hunt, George G., *col.*
Huggins, Ell L., *brig.-gen.*
Jackson, Henry, *col.*
Jackson, James, *U.-col.*
Kelley, Joseph M., *maj.*
Kendall, Henry M., *maj.*
Keyes, A. S. B., *maj.*
King, Chas., *capt.*
Knox, Thomas T., *lieut.-col.*
Lee, Fitzhugh, *brig.-gen.*
Lockwood, J. A., *capt.*
Laud, John S., *maj.*
Ludington, M. I., *maj.-gen.*
McCook, A. McD., *maj.-gen.*
McGregor, Thomas, *col.*
Mackay, Edward G., *maj.*
Merritt, Wes., *brig.-gen.*
Mills, Anson, *brig.-gen.*
Norwell, S. T., *U.-col.*
Noyes, Henry E., *col.*
Oakes, James, *col.*
Powell, Philip P., *capt.*
Pratt, R. H., *col.*
Richards, James R., *capt.*
Rucker, L. H., *brig.-gen.*
Russell, Gerald, *maj.*
Sheridan, M. V., *brig.-gen.*
Swigert, S. M., *col.*
Viele, Charles D., *col.*
Vroom, Peter D., *brig.-gen.*
Wagner, Henry, *U.-col.*
Waite, H. De H., *1st lieut.*
Wesendorff, Max, *capt.*
Wheelan, James N., *col.*
Wheeler, Fred, *maj.*
Whitside, Sam, *M., col.*
Wheeler, Jos., *brig.-gen.*
Wood, T. J., *brig.-gen.*
Woodson, A. E., *brig.-gen.*

CAVALRY OFFICERS.

FIRST CAVALRY.

Colonel.
Wells, Almond B.
Lieutenant-Colonel.
Ward, F. K.

Majors.
Swift, Eben.
Galbraith, Jacob G.
Gaston, Joseph A.

Captains.
Brown, William C.
Brown, Oscar J.
Landis, J. F. Reynolds.
Mills, Albert L.
Scott, William S.
Goode, Geo. W.
Cabell, De Rosey C.
Wright, Edmund S.
Rivers, Wm. C.
Hartman, John D. L.
Davis, Milton F.
Lindsay, Elmer.
Arnold, Samuel B.
Sills, Wm. G.
Murphy, P. A.

First Lieutenants.

Arnold, Percy W.
Moseley, George V. H.
Foy, Robert C.
Hickman, Edwin A.
Tilford, James D.
Fitch, T.
Hazzard, Russell T.
Chapman, Leslie A. I.
McAndrews, Joseph R.
Gleaves, Samuel R.
Nolan, Robert M.
Thomas, Charles O., Jr.

Second Lieutenants.

Smith, Selwyn D.
Enos, Copley.
Graham, Arthur M.
Lininger, Clarence.
Munro, Horace N.
Bell, William H., Jr.
Roscoe, David L.
Rodney, Walter H.
Hodges, Harry L.
Krumm, Herbert Z.

Veterinarian.

Nockolds, Coleman.

SECOND CAVALRY.

Colonel.
Edgerly, Winfield S.

Lieutenant-Colonel.
Schuyler, Walter S.

Majors.
Pearson, Daniel C.
Blocksom, Augustus P.
Boughton, Daniel H.

Captains.
Brett, Lloyd M.
Lewis, Thomas J.
Folz, Frederik S.
Gardner, John H.
Stevens, Charles J.
Sargent, Herbert H.
Trout, Harry G.
Winn, John B.
Harrison, Ralph.
Clark, William F.
Heron, Joseph S.
Wade, John P.
Kochersperger, Stephen M.
King, Edward L.
Orton, Edward P.

LIST OF MEMBERS.

First Lieutenants.

Valentine, William S.
 Johnson, Frederick C.
 Mumma, Morton C.
 Harvey, Charles G.
 Smith, Gilbert C.
 Coughlan, Timothy M.
 Tyner, Geo. P.
 Martin, Walter F.
 McGee, Oscar A.
 Hazzard, O. P. M.
 Garity, Geo.
 Coffey, Edgar N.

Second Lieutenants.

Lynch, Frank E.
 Collins, Robert L.
 Pope, William R.
 McEnhill, Frank.
 Smalley, Howard R.
 Love, Moss L.
 Barry, John A.

Veterinarian.

Lusk, William V.

THIRD CAVALRY.

Colonel.

Dorst, Joseph H.

Lieutenant-Colonel.

Beck, Wm. H.

Majors.

Hein, Otto L.
 Dodd, George A.
 Andrus, Edwin P.

Captains.

Johnson, Franklin O.
 McDonald, John B.
 Heard, John W.
 Tate, Daniel L.
 Rice, Sedgwick.
 Thayer, Arthur.
 Hedekin, Charles A.
 Barton, Frank A.
 Conrad, Julius T.
 Williams, Andrew E.
 Pattison, Harry H.
 Hanna, Matthew E.
 Munro, J. N.
 Harper, Roy B.

First Lieutenants.

Sirmyer, Edgar A.
 Babcock, Conrad S.
 Wallach, Robert R.
 McNally, Reginald E.
 Buchanan, Fred E.
 Cowin, William B.
 Cullen, Dorsey.
 Wood, Robert E.
 Grant, Walter S.
 Benjamin, Julian A.
 Jackson, Robert F.
 Comly, George B.
 Taylor, William R.
 Seoane, Consuelo A.

Second Lieutenants.

Sterling, E. Kearsley.
 Huneker, Irvin L.
 Coppock, Edward R.
 Leather, Robert W.
 Maize, Sidney D.
 Bernard, Thomas P.
 Mitchell, Henry E.

Veterinarian.

Schwarzkopf, Olaf.

FOURTH CAVALRY.

Colonel.

Carr, Camillo C. C.

Lieutenant-Colonel.

Stedman, Clarence A.

Majors.

Murray, Cunliffe H.
 Edwards, Frank A.

Lockett, James.

Captains.

Benson, Harry C.
 Rivers, Tyree R.
 Cameron, George H.
 Cress, George H.
 Hughes, James B.
 Brown, Robert A.
 Koehler, Lewis M.
 Stewart, Cecil.
 Harris, Floyd W.
 Scherer, Louis C.
 Winans, Edwin B., jr.
 O'Shea, John.
 Rutherford, Samuel McP.
 Chitty, William D.
 Arnold, Frederick T.

First Lieutenants.

Henry, Guy V.
 Pershing, Ward B.
 Haight, Charles S.
 Boniface, John J.
 Dorey, Ben H.
 Purviance, Samuel A.
 McCaskay, Douglas.
 Herschel, Fred W.
 Knox, Thomas M.
 Austin, Wm. A.
 Righter, Joseph C., jr.
 Lee, Geo. M.

Second Lieutenants.

Fortescue, Granville R.
 Degen, John A.
 Edwards, Frank B.
 Naylor, Charles J.
 Stott, Clarence A.
 Jurich, Anton, Jr.
 Mohn, Albert J.
 Henry, James B., jr.

FIFTH CAVALRY.

Colonel.

Cooper, Chas. L.

Lieutenant-Colonel.

Robinson, Frank U.

Majors.

Paddock, George H.
 Watts, Charles H.
 Bishop, Hoel S.
 Foster, Fred W.
 Goldman, Henry J.
 Macomb, Augustus C.
 Bryan, Roger B.
 Holbrook, Willard A.
 Traub, Peter E.
 Jenkins, John M.
 McClure, Nathaniel F.
 Fleming, Lawrence J.
 Nissen, August C.
 Pitchard, George B., jr.
 Willard, Harry O.
 Holbrook, Lucius R.
 Dallam, Samuel F.
 Valentine, William S.

First Lieutenants.

McClure, Albert N.
 Foley, Hamilton.
 McClintock, John.
 Sturges, Edward A.
 Myers, Hu B.
 Raynor, Marion C.
 Rodney, Geo. B.
 Dixon, Varlen D.
 Foerster, Lewis.
 Young, John S. E.
 Hasson, John P.

Second Lieutenants.

Disque, Brice P.
 Oliver, Prince A.
 Cooley, William M.
 Mears, Frederick.
 Barnard, Joseph H.
 Hennessey, Peter J.
 Somerville, George R.
 Wheatley, Wm. F.
 Andrews, Edwin D.
 English, Ebert G.
 Rothwell, Thomas A.

SIXTH CAVALRY.

Lieutenant-Colonel.

Bonus, P. S.

Majors.

Gresham, John C.
 Pitcher, John.
 Cheever, Benjamin H.

Captains.

Sands, George H.
 Allen, Henry T.
 Forsyth, William W.
 Steele, Matthew F.
 Cole, James A.
 Byram, George L.
 Howze, Robert L.
 Ryan, John P.
 Rhodes, Charles D.
 Furlong, John W.
 Anderson, Alvord Van P.
 Heilberg, Elvin R.
 Lott, Abraham G.

First Lieutenants.

Raymond, John C.
 Craig, Malin.
 Heintzelman, Stuart.
 Read, Beverly A.
 Karnes, Wm. L.
 Baer, Joseph A.
 Morris, Willis V.
 Biddle, David H.
 Turner, Frederick G.
 Woude, Albert J.
 McNarney, Frank T.

Second Lieutenants.

Stryker, Goss L.
 Lahm, Frank P.
 Sidman, Frank E.
 Miller, Ralph.
 Butler, Rodman.
 Joyce, Kenyon A.
 Place, Olney.
 Winter, John G., jr.
 McCabe, E. R. Warner.

SEVENTH CAVALRY.

Colonel.

Morton, Charles.

Lieutenant-Colonel.

Woodward, Samuel L.

Majors.
 Varnum, Charles A.
 Fuller, Ezra B.
 McCormack, L. S.

Captains.
 Sickel, Horatio G.
 Mercer, William A.
 Waterman, John C.
 Beach, Francis H.
 Vestal, Solomon P.
 Anderson, Edward.
 Butler, Matthew C., Jr.
 Paine, Wm. H.
 Averill, Nathan K.
 Hawkins, Clyde E.
 Bell, Ola W.
 Kennington, Alfred E.

First Lieutenants.
 Mitchell, Geo. E.
 Booth, Ewing E.
 Rhea, James C.
 Conell, William M.
 Bolce, Charles A.
 Lovell, Geo E.
 Bach, Christian A.
 West, Emory S.
 Caldwell, Ralph C.
 Jeffers, Solomon L.

Second Lieutenants.
 Hayden, Ralph N.
 Tatum, Howard C.
 Bamberger, Raymond S.

EIGHTH CAVALRY.

Colonel.
 Anderson, G. S.

Majors.
 Shunk, William A.
 Ripley, H. L.

Captains.
 Hammond, Andrew G.
 Dickman, Joseph T.
 Slocum, Stephen L' H.
 Duff, Robert J.
 Sayre, Farson.
 Farber, Charles W.
 Barnum, Maiver H.
 Evans, Ellwood W.
 Donaldson, Thomas Q., Jr.
 Stockle, George E.
 Sawtelle, Chas. G., Jr.
 Saxton, Albert E.
 Bigelow, Mottimer O.
 Parsons, Lanning.

First Lieutenants.
 Roberts, Hugh A.
 Oliver, Llewellyn W.
 Norvell, Guy S.
 King, Albert A.
 Wesson, Charles M.
 Watson, John.
 Kirkman, Hugh.
 Carson, Lawrence S.
 Coxe, Alexander B.
 Rethorst, Otto W.

Second Lieutenants.
 Terrell, Henry S.
 Walker, Richard W.
 Otis, Frank I.
 Megill, Sabring C.
 Keller, Frank.
 Cunningham, Thos. H.
 Kilbourne, Louis H.
 Smith, Talbot.
 Davis, Frank E.

Veterinarian.
 Stanclift, Ray J.

NINTH CAVALRY.

Colonel.
 Godfrey, Edward S.

Lieutenant-Colonel.
 Godwin, Edward A.

Majors.
 Bigelow, John, Jr.
 Morgan, G. H.

Captains.
 Fuller, Alvarado M.
 Walsh, Robert D.
 Read, George W.
 Nance, John T.
 Armstrong, Frank S.
 Sievert, Herman A.
 Moses, George W.
 Stodter, Chas. E.
 Miller, Alexander M., Jr.
 Kelly, William, Jr.

First Lieutenants.
 Pearson, Samuel B.
 Coleman, Sherrard.
 Winterburn, G. O. W.
 Calvert, Edward.
 Fechét, James E.
 Pilcher, Winston.
 Jones, Frederick M.
 Gibbons, Henry.
 Cole, Casper W.
 Bowie, Hamilton.
 Herman, Frederick J.
 Sterrett, Robert.

Second Lieutenants.
 Barton, Robert M.
 Cox, Edwin L.
 Hathaway, C. Emery.
 Howard, John H.
 Esty, Thomas B.
 Love, Robert R.
 Buchanan, Edmund A.

Veterinarian.
 Tempany, John.

TENTH CAVALRY.

Colonel.
 Augur, Jacob A.

Lieutenant Colonel.
 Hughes, Martin B.

Majors.
 Scott, George L.
 Beach, William D.
 Read, Robert D., Jr.

Captains.
 Grierson, Charles H.
 Watson, James W.
 Freeman, Samuel D.
 Johnson, Carter P.
 Macdonald, Godfrey H.
 Hay, William H.
 Paxton, Robert G.
 Livermore, Richard L.
 Fleming, Robert J.
 Carson, Thomas, G.
 Cavanaugh, Harry LaT.
 Parker, James S.

Jervey, Eugene P., Jr.
 Summerlin, George T.
 Boyd, Charles T.
 Whitehead, H. C.

First Lieutenants.

McCoy, Frank R.
 Farmer, Charles C., Jr.
 Whitside, Warren W.
 Hart, Augustus C.
 Fonda, Ferdinand W.
 Godson, Wm. F. H.
 Cornell, Wm. M. A.
 Oden, Geo. J.
 Palmer, Bruce.
 Hemphill, John E.

Second Lieutenants.

Scott, Walter J.
 Müller, Carl H.
 Bowdish, Myron B.
 Davis, Benjamin O.
 Tompkins, Daniel D.
 Price, Geo. E.
 Cook, Seth W.
 Edwards, William W.

Veterinarians.

McMurdo, C. D.
 Service, S. W.

ELEVENTH CAVALRY.

Colonel.
 Thomas, E. D.

Majors.
 Sibley, Frederick W.
 Wheeler, Homer W.

Captains.
 West, Parker W.
 Haines, John T.
 Brooks, Edward C.
 Hardeman, Letcher.
 Elliott, Stephen H.
 Langhorne, George T.
 Rowell, Melvin W.
 Jones, Samuel G.
 Harbord, James G.
 Tompkins, Frank.
 Clayton, Powell, Jr.
 Leary, Edmund M.
 Vidmer, George.
 White, Herbert A.

First Lieutenants.

McCormack, Willard H.
 Kromer, Leon B.
 Luhn, William L.
 Ryan, Thomas F.
 Taylor, Theodore B.
 Davis, Edward.
 Odell, Albert S.
 Shelley, James E.

Second Lieutenants.

Perkins, Alvin S.
 Westmoreland, Wade H.
 Smith, Walter D.
 Symington, John.
 Warren, Rawson.
 Cocke, John.
 Grunert, George.
 Meade, William G.

Veterinarian.

McDonald, Alex.

TWELFTH CAVALRY.

Colonel.

Kerr, J. B.

Lieutenant-Colonel.

Chase, Geo. F.

Majors.

Guilfoyle, John F.

Kendall, Henry F.

Captains.

Nicholson, William J.

Miche, Robert E. L.

Littebrant, William T.

Hornbrook, James J.

Symmonds, Charles J.

Anderson, Edward D.

Rockenbach, Samuel D.

Cusack, Joseph E.

Morgan, John M.

Parker, Francis Le J.

Craig, John W.

First Lieutenants.

Brees, Herbert J.

Lee, Fitzhugh, jr.

Long, John D.

Sharpley, Arthur G.

Case, Frank L.

Cootes, Harry N.

Burroughs, James M.

Morey, Lewis S.

Kimbball, Gordon N.

Biegler, George W.

Second Lieutenants.

Abbott, James E.

Mayo, Charles R.

Offley, Edward M.

Stott, C. A.

THIRTEENTH CAV'Y.

Colonel.

Hatfield, Charles A. P.

Lieutenant-Colonel.

Parker, James,

Majors.

Hunt, Levi P.

Taylor, Chas. W.

Captains.

Lochridge, P. D.

Dade, Alexander L.

Fenton, Charles W.

Corcoran, Thomas M.

Glasgow, William J.

Phillips, Ervin L.

Sweezey, Claude B.

Whitman, Walter M.

Babcock, Walter C.

Hyer, Benjamin B.

Mitchell, Geo. E.

First Lieutenants.

Longstreet, James, Jr.

Winters, William H.

Ball, Louis R.

Sturges, Dexter.

Heaton, Wilson G.

Davidson, Alexander H.

Lowe, William L.

Steunenberg, George.

Moffet, Wm. P.

Clopton, Wm. H., Jr.

Deitrick, Leonard L.

Second Lieutenants.

Second Lieutenants.

Jacobs, D. H.

Jordan, Harry B.

Russell, George M.

Riggs, Kerr T.

Keyes, Allen C.

Jewell, James M.

Read, John H., Jr.

Fisher, Ronald E.

Hume, John K.

Weyrauch, Paul H.

Zane, Edmund L.

FIFTEENTH CAVALRY.

Colonel.

Wallace, Wm. M.

Lieutenant-Colonel.

Rodgers, Alexander.

Majors.

Hunter, George K.

Hoppin, Curtis B.

Captains.

Pershing, John J.

Koester, Francis C.

Marshall, Francis C.

Ryan, James A.

Johnston, William T.

Lindsey, Julian R.

Hickok, Howard R.

Kirkpatrick, George W.

Andrews, Lincoln C.

Walker, Kenzie W.

Eltinge, Le Roy.

Pope, F. H.

First Lieutenants.

Dean, Warren.

Dudley, Clark D.

Ross, James O.

Duncan, Geo. O.

Bowman, Geo. T.

Tremaine, W. C.

Lear, Ben., Jr.

Mowry, Philip.

Johnston, Gordon.

Second Lieutenants.

Culver, Clarence C.

Mangum, Wiley P., Jr.

Burnett, Chas.

Norton, Clifton R.

Barriger, Wm. S.

McMullen, Joseph I.

Martin, Isaac S.

Holliday, Milton G.

Partridge, Leon R.

Overton, Wm. W.

Robertson, Samuel W.

ASSOCIATE MEMBERS.

The following are eligible to associate membership: (a) Persons who are, or who ever have been, commissioned officers of honorable record in the Regular Army (service other than cavalry) or in the Navy. (b) Persons who are, or who have ever been, commissioned officers of honorable record of the National Guard of any State or Territory. (c) Former general officers and former commissioned officers of cavalry of honorable record in the Confederate Army.

ADJUTANT GENERAL'S DEPARTMENT.

Colonel.

Wagner, A. L.

Lieutenant-Colonel.

Kerr, J. T.

Major.

Evan, R. K.

INSPECTOR GENERAL'S DEPARTMENT.

Lieutenant-Colonel.

Mills, Stephen C.

Major.

Irona, J. A.

QUARTERMASTER'S DEPARTMENT.

Majors.

Reullen, Geo.
Miller, William H.
McCarthy, D. E.

Captain.

Yates, A. W.

SUBSISTENCE DEPARTMENT.

Colonels.

Woodruff, C. A.
Sharpe, H. G.

Captains.

Grove, Wm. R.
Kilian, J. N.

MEDICAL DEPARTMENT.

Lieutenant-Colonels.

Hoff, J. Van R.
Comegys, E. T.

Majors.

Gardner, E. F.
Banister, W. B.
Rafferty, Ogden.

PAY DEPARTMENT.

Colonel.

Towar, A. S.

Lieutenant-Colonel.

Tucker, W. F.

Captain.

Lacy, F. E.

Major.

Watrous, J. A.

CORPS OF ENGINEERS.

Lieutenant-Colonels.

Allen, Chas. J.

Miller, A. M.

Majors.

Leach, Smith S.

Biddle, John.

Captains.

Zinn, G. A.

Morrow, J. J.

Craighill, W. E.

ORDNANCE DEPARTMENT.

Major.

Blunt, S. E.

Captain.

Clark, C. H.

CHAPLAINS.

Anderson, Wm. T., 10th cav.

ARTILLERY CORPS.

Majors.

Schenck, A. D.

Andrews, H. M.

Macomb, M. M.

Wisser, J. P.

Captains.

Rowan, H.

Strong, F. S.

Treat, C. G.

Foote, S. M.

Ridgway, T.

Conklin, John.

Sturgis, S. D.

Mott, T. B.

Straub, O. I.

Hayden, J. L.

Foster, Leo F.

First Lieutenants.

Carpenter, Edward.

Granger, R. S.

Faulkner, A. U.

Edwards, Frank B.

FIRST INFANTRY.

Colonel.

Duggan, W. T.

Captain.

Lacy, F. E.

THIRD INFANTRY.

Lieutenant-Colonel.

Macklin, J. E.

FOURTH INFANTRY.

Major.

Mason, C. W.

FIFTH INFANTRY.

Major.

Brown, W. H. C.

SIXTH INFANTRY.

Colonel.

Miner, C. W.

Major.

Wotherspoon, W. W.

Captain.

Poore, B. A.

SEVENTH INFANTRY.

Major.

Hardin, E. E.

Captain.

Goodin, J. A.

Penn, J. A.

Farnsworth, C. S.

Second Lieutenant.

Briggs, A. L.

NINTH INFANTRY.

Colonel.

Robe, C. F.

Captains.

Noyes, C. R.

Wise, H. D.

ELEVENTH INFANTRY.

Colonel.

Craige, J. D.

Major.

Jackson, J. B.

THIRTEENTH INF.

Captain.

Johnson, Arthur.

FIFTEENTH INF.

Captain.

Exton, C. W.

First Lieutenant.

Sillman, R. H.

SIXTEENTH INF.

First Lieutenant.

Morton, C. E.

SEVENTEENTH INF.

Colonel.

Craigie, D. B.

NINETEENTH INF.

Captains.

Foster, A. B.

Burkhardt, S. Jr.

TWENTIETH INF.

Colonel.

McCauley, Wm. S.

Captains.
Hirsch, H. J.
Mearns, R. W.**TWENTY-FIRST INF.**

Colonel.

Kline, Jacob.

Major.

Nichols, W. A.

TWENTY-SECOND INF.

Lieutenant-Colonel.

Maus, M. P.

TWENTY-FOURTH INF.

First Lieutenant.

Knox, R. S.

TWENTY-FIFTH INF.

Captains.

Roudiez, L. S.

Allbright, F. H.

TWENTY-SIXTH INF.Captains.
Ely, H. E.
Rosenbaum, O. B.First Lieutenant.
Shaw, G. C.**PORTO RICO REGIMENT.**

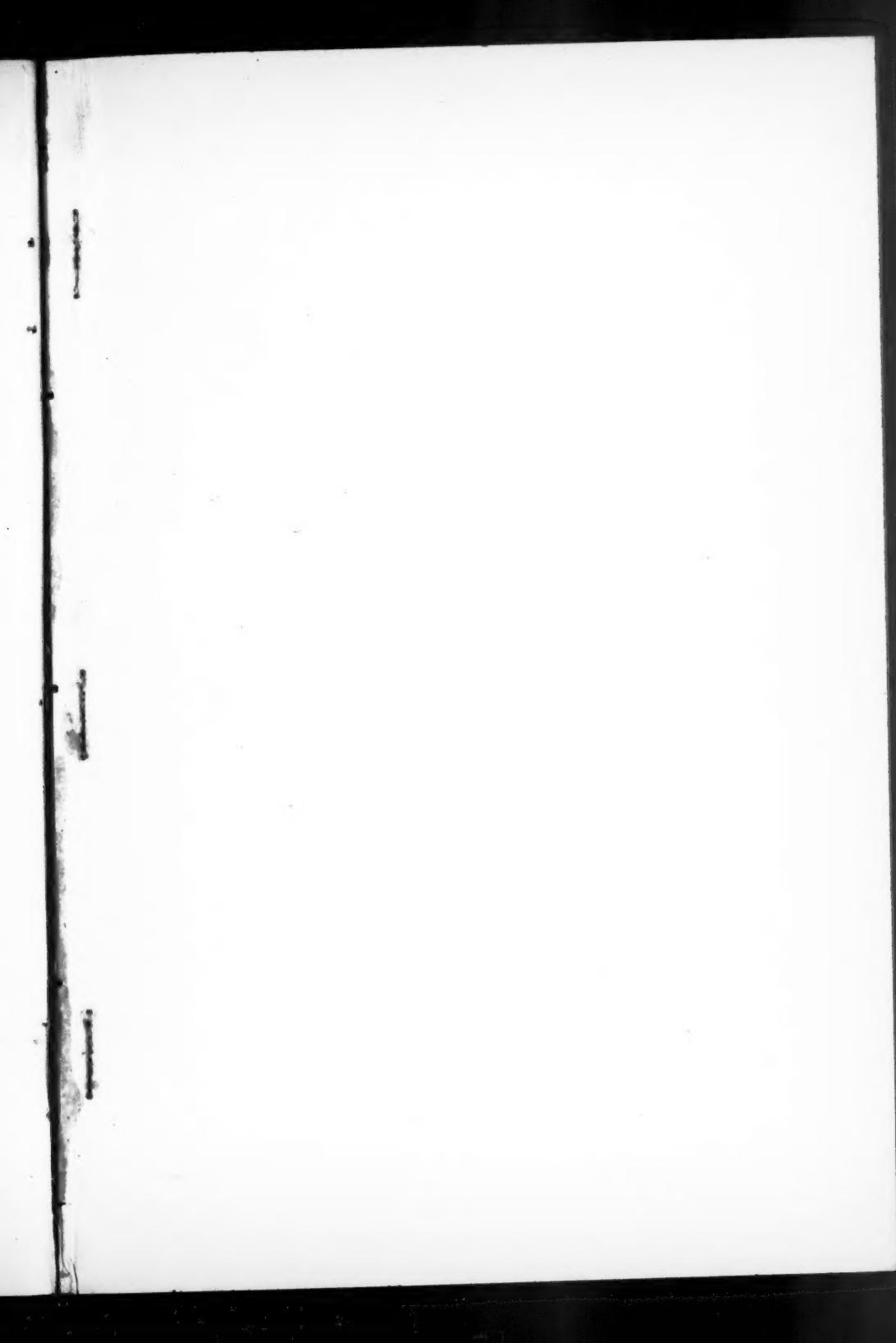
Captain.

Townshend, O. P.

First Lieutenants.
Taulbee, M. K.
Patterson, Wm. L.Second Lieutenants.
Armstrong, W. H.
Stephenson, F.**RETIRED LIST.**Avis, E. S., *capt.*
Dodge, T. A., *lt.-col.*
Head, G. E., *lt. col.*
Page, Charles.
Pearson, E. P., *col.*
Russell, E. K., *maj.*
Smedberg, Wm. R., *capt.***NATIONAL GUARD.****CALIFORNIA.**Fulie, C. J., *capt.*
Vierra, F. M., *2d lieut.*
Winham, F. W., *1st lieut.***COLORADO.**Chase, John, *maj.***CONNECTICUT.**Cole, G. M., *gen.***ILLINOIS.**Bush, F. N., *lieut.*
Cassidy, H. C., *capt.*
Tripp, S. O., *capt.*
Wilson, J. C., *maj.***IOWA.**

Lincoln, James R.

KANSAS.Metcalfe, W. S., *col.***MASSACHUSETTS.**Perrine, W. A., *maj.*
Parker, S. D.
Roome, B. R., *lieut.***NEW YORK.**Appleton, D., *col.*
Bryant, W. A., *capt.*
Olmstead, Edward.
Parker, C. Jr.
Wieman, H.**PENNSYLVANIA.**Schermerhorn, F. E.
Ott, F. M., *capt.*
Ripple, E., *col.***CIVIL LIFE.**Bear, C. U., *lieut.*
Bryan, *capt.*
Cable, Wm. A.
Craig, H. D., Jr., *lieut.*
Curry, W. L.
Lowe, A. W.
Rawle, J., *lieut.*
Rawle, Wm. B., *lt.-col.*
Wilson, F. L., *maj.*
Winter, M. A., *col.*





BRIGADIER-GENERAL J. FRANKLIN BELL,
UNITED STATES ARMY.